The Philosophy Shop

Ideas, activities and questions
to get people, young and old,
thinking philosophically

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We should set aside a room, just for ourselves, at the back of the shop …

From** On Solitude **by Michel de Montaigne

But, then, is this a fair exchange that you propose? You seem to me to want more than your proper share: you offer me the merest appearance of beauty, and in return you want the thing itself, 'gold in exchange for bronze'.

Socrates speaking in the** Symposium **by Plato

O dear Pan and all the other gods of this place, grant that I may be beautiful inside. Let all my external possessions be in friendly harmony with what is within. May I consider the wise man rich. As for gold, let me have as much as a moderate man could bear and carry with him.

Do we need anything else Phaedrus? I believe my prayer is enough for me.

Socrates' prayer from the** Phaedrus **by Plato

Introduction

What is this book?

A good deal of books written to introduce the reader to philosophy are *instructive*. Either straightforwardly so, in that they explain the problems of philosophy and then take the reader through the traditional debates, or they are instructive with the *appearance* of being exploratory. This is partly due to the limits of the written word: however exploratory the author would like her book to be, and however many questions she may raise, the lack of interaction seems to demand that the author provide answers of one sort or another at some point. As Plato said, real philosophy cannot be done through the written word as books can't reply to questions or clarify what is not understood. The irony of Plato's words lies in that he said them, or rather had Socrates say them, in one of his *written* dialogues – the *Phaedrus* – and today these dialogues are the only way we know of Plato's philosophy. His *written* critique of *written* philosophy encapsulates a tension of which Plato was all too aware: we

can’t do philosophy properly with the written word, but it seems we can’t do without it either. Plato’s own answer to this is his lack of one. Many of his dialogues end inconclusively and the invitation this presents for the reader is to continue with the discussions that Plato had begun. The implication which I take from this is that Plato is saying that philosophy is a continuous, ongoing dialogue.

The conversational book

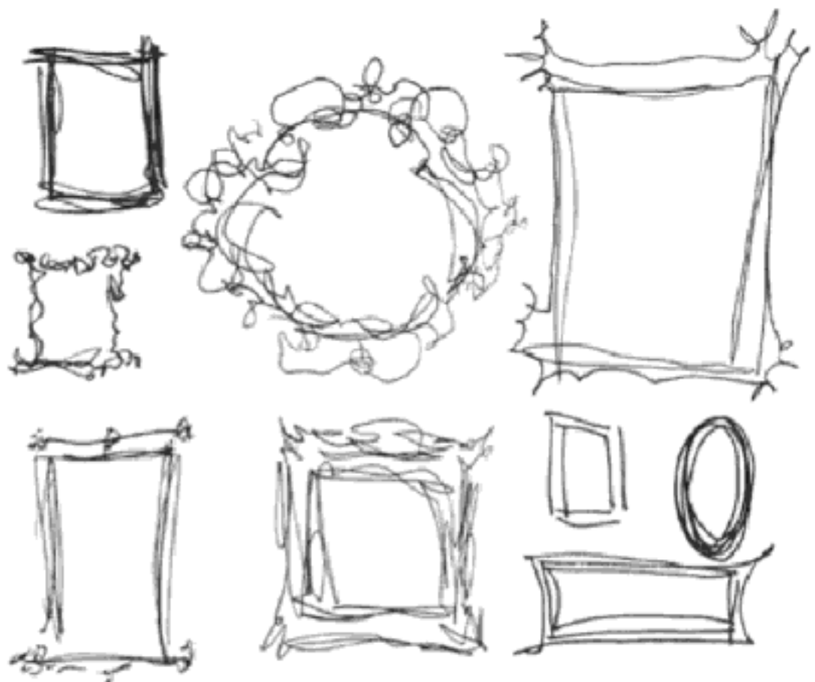
This book responds to this problem in a conversational, Platonic spirit. Questions are raised by the use of a controversy brought out by a story or scenario, poem or activity; yet, unlike Plato, a dialogue is not written but left to the reader or class engaged with the problem to think through for themselves. In this sense the book is meant to be *interactive*. For this reason, I shall refer to the reader as the ‘participant(s)’ from now on when referring to either class or group situations because this captures both the lone reader and the classes of children that may be *read to*. There is another sense in which I wish the book to be interactive. At the end of each section, and where appropriate, you will find a note on the source of the entry and also the key philosophical topics, ideas and the philosophers’ names associated with them. These have been included to allow the interested reader, teacher or class to pursue some of the ideas and to find out more about the philosophers that have thought on these questions and topics throughout history. Wikipedia has some very helpful introductory entries on many of these key words but there are also some very good, more specialised philosophy websites which can be consulted, such as The Stanford Encyclopedia of Philosophy. See the back of this book for useful addresses.

Seeing controversies

It is often said that the primary and intrinsic value of doing philosophy with children is that it is enjoyable. This, of course, depends on the fact

that children do enjoy doing philosophy. And on the whole I am happy to report, from my own experience and observations, that this is true. But what about those who don't enjoy philosophy? I have noticed that many of those who claim not to enjoy philosophy are unable to stop themselves engaging with a philosophical problem, once they recognise it *as* a problem.

The frames



In this book we have tried to find a 'frame' for each of the entries that is presented to the participant. The frame is the narrative or literary context in which the philosophical idea or problem is presented. Sometimes it is a short story, a thought experiment or scenario, a poem, image or even an activity. The frame helps to achieve the following:

- It aids *understanding* of what are often quite difficult ideas. Philosophy can never be made to be easy – it is by its very nature a difficult pursuit – but it can be made accessible, as well as enjoyable.

- It *contextualises* the philosophical issue so that the participants are not lost in abstractions.

- The frame *engages* the participant(s) in an enjoyable way with the problem or idea.

- It gives *meaning* to the problem; the frame provides a context that shows why the problem, and thinking about it, matters. This may, in a direct way, show how it matters to the participant or in the real world, or it may simply show why it matters ‘in the story’; either way it connects the problem with value for the participant.

- The frame *motivates* the participant to solve the problem, often for narrative reasons of one kind or another. By thinking about the problem they may be helping a character or they may simply be providing the basis for the continuation of the story. It should be pointed out that many of the frames are incomplete (see ‘What Goes Up…’ on page 167) and this is because the sense of unresolved mystery often helps to intrigue the participant and to keep them thinking about the problem in some way.

- The frame adds *colour* to what could be very dry and colourless. Some have touches of humour here and there to give an extra element to enjoy.

- And sometimes the frame itself *contains aspects of philosophy* or it adds, in some way, to the philosophical problem in a special, integrated way. In other words, if the frame were not there, then neither would some aspect of the problem (see ‘What Zeus Does When He’s Bored’ on page 88).

Each frame has been designed to try to illuminate the problem so that the participant can recognise it as a problem. It remains possible that not all the problems will be clear to all the participants all of the time, but sometimes all that’s needed is some more time to mull over the frame until the problem comes into focus. At The Philosophy Foundation we have found that exploring the multiplicity of different perspectives afforded by a class or group is often the best way to reveal the tensions, and therefore the controversies, in these little philosophical appetisers.

Thoughtings and philosophical poetry

You will notice that some of the frames, or stimuli, for the entries in this book are in verse. Not quite poems and *not quite* not poems, they are called *Thoughtings*, as they have been written to stimulate thoughts and thinking on specific topics or problems (see the Further Reading section where you can find more *Thoughtings*). Children enjoy ideas presented in verse and they learn them remarkably quickly. Also, see David Birch's entry in 'Afterthoughts' on Philosophical Poetry (on page 299) for some inspiring ideas on how to get children writing their own philosophical poems.

Thought experiments

I mentioned that the frame may contain *thought experiments*. But what is a thought experiment? It's a device used by philosophers to get us thinking about a particular issue or concept under a certain, very specific set of conditions. It is precisely because of the way in which they attempt to control the variables using thought alone that they have been given the name 'thought experiment'. They are not used exclusively by philosophers; there are many famous thought experiments in science too, such as 'Newton's bucket', cooked up by Newton in an attempt to show that space is absolute. Even though associated with philosophers, and even though thought experiments have been used for millennia, the coining of the term itself has been credited to the scientist Ernst Mach. Sometimes the thought experiment is presented in its unembellished, original form (see 'The Flying Man' on page 152), other times the thought experiment has been wrapped up in a story (see 'Bat-Girl' on page 170).

The topic questions: Start, Further and Central

For Plato and Aristotle, ‘where you start’ is very important in a philosophical enquiry, and – continuing with the ‘place’ metaphor (or *topos* in Greek, where the English ‘topic’ comes from) – ‘where you go’ and ‘how you get there’ are just as important. Plato and Aristotle both used the visual image of a chariot racecourse to illustrate the progress of philosophical enquiry. An important part of helping to find *your* place, reveal the controversies and navigate around them, are the carefully chosen questions that will be found accompanying the stimuli. I have divided these into three kinds: the *Start Question* followed by a series of *Questions to take you further* – from now on to be referred to as ‘further questions’ – amongst which are the *Central Questions*.

The Start Question is designed to take the participant(s) straight to the problem by asking the question that has proved, in the classroom, to best illuminate the problem in the context of the stimulus. The Start Question is usually linked to the frame; it is the question that the participants are, overall, trying to answer and it begins the discussion by being asked explicitly. You should think of the Start Question as being like a ‘you are here’ arrow on a map or floor-plan and as you explore the terrain it is helpful to return to this point frequently. It allows you (or the participants) to find your bearings and once you know where you are,

you need to know where to go.

The further questions are then presented as questions *into* the problem or issue and often proceed gradually *out of* the story or stimulus (although it should be pointed out that you should not feel that these questions need all be asked or that they should be asked in order). Beginning with the Start Question and moving to the further questions enables the discussion to begin reasonably concretely, but to move gradually towards more abstract thinking and discourse. For example, in 'Who Gets What and Why?' on page 235, the Start Question is: 'How much of the cake should each child get?' But then among the last of the further questions is: 'What is fair?' The further questions are often the deeper, more hidden questions that lie behind the more explicit Start Question. The further questions have been chosen carefully to guide the participants and are informed by the debates, positions and arguments around that topic to be found in the standard literature. By way of analogy, if the stimulus is what you find displayed on the door, the Start Question enables you – and invites you – to open the door into the puzzle or problem; and the further questions then guide you deeper into the puzzle or problem so that you don't lose your way. It should be noted, however, that losing your way is a perfectly natural part of the philosophical process, so if you do get lost, it's often a sign that you are *doing* philosophy, not that you are failing to do it, as is often thought.

Perhaps the most central questions of all those among the further questions list are the 'What is …?' questions, such as 'What is beauty?' or 'What is belief?' These are traditionally known as *Socratic Questions* because of the crucial role they play in Socrates' method, his philosophical pursuits and concerns. However, in order to follow the Start and further questions, and remaining with the 'place' metaphor, I have called them *Central Questions* because of how philosophically fundamental they are. They are highlighted (in **bold**) to stand out in the list.

At some point during any of the discussions around the entries in this book it is often helpful to examine a Central Question such as ‘What is beauty?’ This can be done by simply asking the question and discussing it. However, you will notice that the children, especially the very young ones, will often say something like ‘beauty is when something is beautiful’. To help them avoid this kind of circularity, employ a strategy I’ve called ‘Break the Circle’ (see *The If Machine: Philosophical Enquiry in the Classroom* by Peter Worley) and add the stipulation, when asking them a Central Question, that they must not say the word they are examining in their answer. So, *can they say what the word ‘beauty’ is, or means, without saying the word ‘beauty’ or ‘beautiful’ in their answer*? This is a beginner’s version of what philosophers call *conceptual analysis*.

A note to teachers, chairs and facilitators

As a teacher, chair or facilitator it is crucial to read through – but more importantly to *think through* – the further questions, as these provide an overview of the ‘thinking landscape’ mapped out by the scenario. It is not important to necessarily ‘have the answers’ to the problems in this book but it is of the utmost importance to have thought about them for yourself to most effectively use this book with your class or students and to help them navigate their way around the topics. If you do want ‘answers’, then the best you can do is to learn the various lines that inhabit the canonical debates on these issues, so that you refrain from saying what *you* think is the answer but at least provide some information on what the various voices have contributed to the debate. It should be noted that you should try, as much as possible, to avoid giving any answers when chairing a Philosophical Enquiry. At The Philosophy Foundation we have noticed that the natural diversity of ideas that the children are capable of is dampened when the teacher or facilitator shares their own views. Once the children know what the teacher thinks then it is likely that they will repeat different versions of this view. Giving answers may also spoil the interactive aims of this book.

Space to think

I have also left space for your own questions and notes where you see the heading ‘Your Questions’. This enables you to grow your list of further questions based on your own thoughts and reflections and/or those of the participants involved in the discussions.

Works well with …

There is also a list of suggested companion entries that should work well with the entry that is being used, depending on the direction that the group takes. This helps to build lesson plans and schemes of work based on themes and related topics. But it should also be invaluable to the teacher if a particular entry is not working with a particular class. Maybe the issue just isn’t ‘biting’ for them or maybe it’s a little too advanced; or maybe you just need to read a new entry to keep up the pace of the session or to keep them interested. If so, then a quick glance at the ‘Works well with’ section should direct you to another suitable entry. The ‘Time’ section is a very good example of how this should work, as many of the entries are designed for short enquiries and they will easily lead on to one other. So, if you start with ‘Superbaby Time!’ the children are very likely to refer to something to do with the direction of clocks and the direction of time; in which case introduce ‘The Big Time Experiment’. This section will also help with differentiation between groups of differing levels of ability. So if your theme is ‘time and time travel’ then you should be able to find entries that groups of differing levels of ability should be able to meet. In this way you may well cover three, four or more entries in one session, possibly at the same time. The ‘Works well with’ list should make this approach to using the book much easier for the teacher or facilitator.

Who is this book for?

This book is for anyone who picks it up and then wants to read on. It is for those who prefer the active engagement with ideas over the passive receipt of information. The book includes entries for a wide range of ages – the starting age for each entry has been included under the title. Some have been written for young children in primary school (such as the various adventures of Phil and Soph) and some would only be appropriate for older participants (such as 'Gun' on page 223) but there are plenty of examples that, though written to *include* younger children, do not preclude the participation of older people. I challenge any-aged reader to read 'Bobby the Punching Bag' (on page 189) without becoming engaged on one level or another. We have sometimes included the label 'Advanced' in entries that are thought to stretch the young mind just that little bit further. These would be suitable for able classes, groups of gifted and talented children or groups and classes that have become familiar with and adept at doing philosophy. But don't be afraid of trying more advanced entries; your class may surprise you.

There may also be more specific audiences for whom the book will be of interest.

Teachers and classes

There are a number of ways of doing philosophy with children but what they all share is the use of enquiry that is open-ended – extended discussions using questioning and reasoning – for engaging classes. Some recommend enlisting the children to formulate and select questions (Philosophy for Children, or P4C) and others recommend the use of carefully constructed questions that are put to the children, such as the start and further questions in this book. *The Philosophy Shop* can, in some cases, be used in either way but it should be noted that many of the examples have been carefully selected for their *philosophical focus*. By allowing the children to choose their own questions the focus may be lost. Having said that, many more interesting philosophical questions may be discovered by the children when they formulate their own

questions based on their concerns and interests. Many of the more fleshed-out stories, such as 'The Girl from Yesterday' (see page 69), have a good deal more going on than is covered by the prepared questions. A balance between the two approaches is probably the best, so that the focus is preserved but the participants guide the discussion within the remit of the focus. Use the 'Your Questions' section in the book to write down questions that come up during discussions. The Philosophy Foundation has devised its own method of philosophical enquiry known as PhiE that attempts to achieve that balance. A short description of this is included on page 10 (for a fuller explanation of the method see *The If Machine: Philosophical Enquiry in the Classroom* by Peter Worley).

Philosophy courses, university seminar groups and tutorials

One way to introduce a philosophical topic, and the way that most philosophy courses opt to do so, is to explain the topic (e.g. epistemological scepticism) and then to set readings by philosophers who have made important contributions to the debates surrounding the topic (e.g. Descartes' *Meditations*). However, The Philosophy Foundation advocates a different approach. We recommend presenting the students with a stimulus that captures one or more of the essential concepts or problems contained in a philosophical topic. For instance, Chuang Tzu's 'Butterfly Dream' question (see page 169) introduces the concerns of epistemological scepticism (particularly the dreaming argument). The students are encouraged, first of all, to engage by themselves with the stimulus, thus providing a context of the students' own thinking on the topic. This enables the course leader to then place the ideas and philosophers into the context of the students' own thinking. This way, the students are already philosophically engaged when they meet the philosophy and philosophers. This book provides plenty of examples of stimuli for use in this way, many of which have been written by philosophers who are experienced in engaging students with

philosophical problems and topics at university level.

Philosophy reading groups or discussion groups, youth groups and church groups

Many people enjoy getting together through the excuse of discussions around books. Philosophy groups, where the excuse is ideas, are also on the increase as they find favour with many people keen to think together. If a philosophy group appeals to you, then this book is the perfect resource as the entries are stimulating for all ages, but also accessible; they are designed to help anyone 'get to the philosophy' as quickly as possible without having to wade through pages of written text. That said, groups are also encouraged to use the suggestions at the end of the entries to follow up any ideas or discussions that have particularly captured the group's interest with primary source material – that's the philosophy written by the philosophers that lies behind, and which inspired, the entries in this book.

Parents with their children and after-school philosophy clubs

At The Philosophy Foundation we are often contacted by parents who would like to find resources so that they can encourage philosophical thinking in their children. There is a plethora of books for teenagers which they can read on their own and there is a reasonable amount of resources for younger children in classrooms, but there doesn't seem to be anything for younger children which would be suitable for parents to use. *The Philosophy Shop* aims to change that. Though the content of this book is wide ranging in terms of the age of the reader/participant(s), many of the entries are suitable for young children, and in some cases, very young children. You will find a recommended 'starting age' at the top of each entry underneath the title. It is recommended, however, that because of the wide-ranging material contained herein, that the parent

use the book selectively with their child; it is not advisable for a parent to leave the book with their child for them to read on their own. Any parent using this book with their child will do well to note that philosophical discussions with children are often more fruitful when there is a group of children than when there is just one child. This, of course, will depend very much on the child. Parents should also take a look at the 'Quick guide to running a PhiE' (below). One way to use *The Philosophy Shop* would be to get a group of parents to run an after-school philosophy club. Combined with some games (see The Philosophy Foundation members website www.philosophy-foundation.org for game resources), and possibly some cakes and drinks, a philosophy club could be a great and fun way to get your children started on thinking philosophically.

The lone, interested reader

But don't think this book is only for groups. It should also appeal to anyone who likes to think, or who wants to think more, particularly those who like to do so without having to wade through pages of text and information. Think of each example like a Japanese haiku, but perhaps with a more European flavour. Open it up, read an entry, look at the questions, let them roll over your mind. Take it on journeys and dip in; open it up whilst waiting for a bus or sitting on the Underground, leave a copy in the loo, or use it to steer dinner party or family gathering

discussions away from the same old topics. But to get the most out of this book, the lone reader is encouraged to use it to stimulate their own investigations and to pursue their own lines of enquiry. This way the reader is invited to write the second half of the book themselves.

A quick guide to running a PhiE (Philosophical Enquiry)

Whether for a discussion group at the pub, a university seminar or a classroom of primary school children, it is useful to have some hints and tips handy on how to conduct a group discussion. First of all somebody needs to be appointed 'chair' of the discussion (also known as 'the facilitator') and it is often best if the facilitator makes a commitment not to join in the discussion but to allow – and aid – the participants to follow their own discussion based on the stimulus presented. So here is a quick guide to running an enquiry around the entries in this book:

1. **Present the *stimulus***

   Read or tell the story, poem or instructions to the participants. Perhaps read or tell it more than once, using different modes of presentation if necessary and if you are able to do so with the stimulus in question (see 'Dizzy!' on page 269 for an example of different modes of presentation based on *auditory*, *visual* and *kinaesthetic* learning styles; see also 'Not Very Stationary Stationery' on page 191 for the use of drama to help with understanding; and see 'Introducing Pencil Person' on page 41 for the use of props to help bring a stimulus to life). These entries act as examples; you should be creative about how else you can help to better communicate other stimuli in the book using these entries as models.

2. **Allow *comprehension time* if necessary**

   Particularly with younger children, it may be necessary to have the participants say back to each other what they think is going on in the

stimulus. For instance, if you have read ‘Arete and Deon’ (see page 217) you may want to begin by asking the children to list as many (salient) features of the two children in the story as they can. It may also be helpful to list the features as they are recalled under the names ‘Arete’ and ‘Deon’ on the board. This means that not only have the children processed the story better, but they will also have the important information about the characters in view throughout the discussion. This is something you may want to do with many of the entries in this book.

3. **Ask the *Start Question***

   The facilitator should make sure that they ask this question clearly. It should be written up for all to see. The exact wording of the question should be preserved as carefully as possible until the dynamic of the discussion moves towards another question. But very often if this happens it will still serve to answer the Start Question better. So keep returning to it.

4. **Allow *talk time***

   Once the group have been presented with the stimulus and have had the Start Question put to them, they will need to have a few minutes to think/talk it through with the person or people next to them. This should be done in pairs or in small groups.

5. **Run a *group enquiry* on the Start Question**

   Once asked, answering the Start Question will be the main task of the discussion, but to help keep things focused the facilitator should refocus the discussion fairly regularly by restating the Start Question. Sometimes the discussion will naturally move to one of the further questions as the focus and, in this case, refocus the group to that question instead. Some of the entries are designed to be fairly short enquiries (see ‘Dizzy!’ on page 269 or ‘Negative Nelly’ on page 278) whereas others are written to be able to extend into longer enquiries (see ‘The Clockwork Toymaker’ on page 81).

6. **Be *mindful* of the further questions**

   The facilitator should listen out for signs that the group has moved – or is moving – towards one of the further questions. Someone may say, 'But, what is beauty anyway?' in a discussion around 'Louis' Beauty Detector' (see page 227) clearly indicating a need to stop and consider the further question (also a Central Question), 'What is beauty?', before returning to the Start Question.

7. ***Introduce* the further questions only as and when necessary**

   Do not see the further questions as questions to be gone through in order, like a list; they are there for guidance only. You should let the discussion determine which of the further questions to introduce, and do so only where the discussion invites it.

Fill in Your Questions

At the conclusion of the discussion, note down any new questions that have occurred to you or that were introduced by the participants in the discussion.

8. ***Works well with …***

   See what other entries in the book would provide good follow-on discussions. For instance 'Phil and Soph and the Meeting' (see page 161) works really well as a starter activity for 'Thoth and Thamus' (see page 256). Many of the entries in the 'Time' section work well as part of a pick-and-mix approach for one session based on what direction the discussion takes. You may well end up including three or four of the 'Time' entries in one session.

9. **Research the *philosophy* that can be found at the end of each entry**

   For instance, after discussing 'Empty' (see page 52) or 'Immy's Box' (see page 20) then find out more about Newton and absolute time/space, Leibniz and relational time/space, or Kant and psychological time/space.

Although this will serve to get you started, if you are a primary or

secondary classroom teacher you may feel that you want to find out more about how to conduct discussions effectively. So, for a much more detailed description of how to conduct a discussion or enquiry see *The If Machine: Philosophical Enquiry in the Classroom* by Peter Worley where you will find out more about speaker management, facilitation skills and strategies for getting more good thinking in your classroom, as well as 25 more extensively detailed lesson plans. The Philosophy Foundation also provides training in questioning and enquiry skills. See www.philosophy-foundation.org for more details and more resources.

The Shop Part I

Metaphysics or What There Is

Metaphysics: Ontology (or Existence)

A Knife Idea

Peter Worley

Starting age: 10 years

A caveman called Ug has recently found a mammoth that has died naturally and so doesn't have the characteristic puncture wounds that sabre-toothed tigers leave. Winter is drawing near. He needs the skins and the meat but is unable to cut the mammoth open because knives haven't been invented yet.

Later that day whilst Ug is collecting stones to make a fire –

fire-making *has* been invented! – he cuts himself on a sharp rock (a rock we now call ‘flint’). This gives him an idea: he takes the sharp-edged rock and uses it to cut open the mammoth. This enables him to get to the meat and, with the help of his new tool, to remove the skin.

The following day he uses another harder type of rock to chisel the flint into a shape that has one very sharp side making his new tool even more efficient. With his new tool he is able to make himself all sorts of other things – as yet uninvented – such as bowls, a stool and a table. Later he learns how to make more of his cutting tools, which he uses either to replace them when they break or to exchange with other cavemen for goods. Soon all of his tribe has the new tool and they give it the name ‘knife’.

Start Question When did the object become a knife?

Think about the Start Question before looking at the suggestions below.

Was it…

1. When the rock he would make it from was lying on the ground?

2. When he cut himself on the rock?

3. When he had the idea?

4. When he chiselled it into shape?

5. When he first used it?

6. When it was first given the name ‘knife’?

7. Or at some other time? If so, when and why?

Questions to take you further

- When does something become what it is?
- What exactly is a knife? Can you define a knife?
- Is Ug's tool a knife or not?
- Does a knife have to be a certain shape?
- If 'the knife', 'the bowl', 'the stool' and 'the table' don't yet have names, what are they?
- **What is existence?**
- What does 'exist' mean?

Your Questions

-
-
-

Works well with

✓ The Philosophical Adventures of Pencil Person pages 41–46

✓ Phil and Soph and the Ice Cream

✓ Just Testing!

✓ A Heap of Exercises?

✓ Of Fences

✓ *The If Machine:* The Chair[1]

Philosophy: Ontology, existence, being, sense and reference, Aristotle, Wittgenstein, Frege.

The 2 Square

Peter Worley

Starting age: 7 years

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2 2

2 2

Start Question Take a look at the 2s above. How many numbers do you think are there?

Questions to take you further

- How many different answers can you think of?
- If someone said that there are no numbers there, can you say why they might say that?
- **What is a number?**
- Are numbers real or made up?

- Are numbers invented or discovered?
- Where can numbers be found?
- Are the symbols that you see in ‘the 2 square’ numbers?
- If not, what are numbers then?
- Draw a number 2 on a blank piece of paper. Now stare at it for a few minutes. Does it still look like a 2? Turn it around and look at it from different sides. What does this exercise make you think?

Your Questions

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Works well with

✓ A Pageful of Nothing

✓ Phil and Soph and the Numbers

✓ Doughnut

✓ A Hole Load of Nothing

✓ Some Sums with Zero

✓ *Thoughtings:* Number Wonders[2]

Source: A lesson plan on Plato’s Forms by Rob Torrington.

Philosophy: Philosophy of maths, fictionalism, Plato, Aristotle and

Forms.

Doughnut: Experiments with a Hole

Alfred Archer

Starting age: 5 years

Props

- (Optional) A doughnut-shaped object such as a children's toy. Or a doughnut (could be a bit messy!).
- (Optional) A packet of Polo mints.

Alice holds a doughnut in her hand. She thinks about the hole in the middle of the doughnut. She asks herself a series of questions and performs some 'experiments'. Here are her questions and experiments for you to try.

Start Question Does the hole in the doughnut exist? Or (depending on the age of the participants) is the hole in the doughnut something or nothing?

Questions to take you further

- Is the hole part of the doughnut?
- Is the hole an object?
- Is the hole something, or is it nothing?
- **What is a hole?**
- *Experiment 1:* If you move the doughnut around, does the hole move too?
- *Experiment 2:* If you eat the doughnut, do you eat the hole?
- *Experiment 3:* Could you eat the hole without eating the doughnut?
- *Experiment 4:* If you break the doughnut in two where does the hole go?
- Can you have a *whole* hole?
- Can you have *half* a hole, or an incomplete hole?

Your Questions

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Works well with

✓ Immy's Box

✓ Empty

✓ The Sound of Silence

✓ A Hole Load of Nothing

✓ A Pageful of Nothing

✓ *Thoughtings:* A Disappearing Riddle

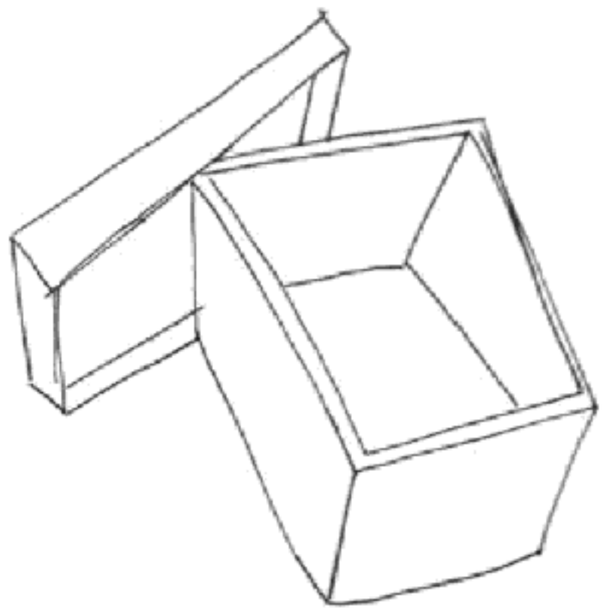
✓ *The If Machine:* Thinking About Nothing

Source: http://plato.stanford.edu/entries/holes/

Philosophy: The philosophy of holes, ontology, epistemology, reference, *entia representationis* ('as-if' entities, fictions).

Immy's Box

Peter Worley



Starting age: 10 years Advanced

Immy has a box and he wants to empty it. But he wants to empty it *completely and utterly*. First he opens the box and finds bits and bobs in it such as a pencil, a rubber and some little toys.

[*If you are doing this with a class then use a real box with some bits and bobs in it*.]

He takes each thing out, one at a time. Finally he has taken all the objects that were in the box out of it. *But is it empty?*

Start Question 1 Is the box empty?

Questions to take you further

- Can you think of something that might be in it?
- Is ‘empty’ the same as ‘nothing’?
- Can the box be full of nothing?
- Is the inside of the box inside the box?
- **What is emptiness?**

Immy will remove whatever you can think of that is still in the box. So, what *can* you think of? List it, or them (for example, the group might suggest finger prints, germs or atoms) and Immy will remove it, or them.

Once he has removed whatever you can think of, *is the box finally empty?* Or is there something else that is still in the box?

Keep going until you think Immy will be satisfied that it is finally completely and utterly empty. Can you do it?

Start Question 2 Will the box be able to be emptied completely and utterly?

Questions to take you further

- Is it even possible?
- Is there something that can never be removed?
- The definition of a *vacuum* is ‘space entirely devoid of matter’. Devoid means ‘completely without’ and *matter* means ‘physical stuff’. If you manage to achieve a *vacuum* in the box would the box be completely empty then? Or would there still be something you can’t remove?
- What about the *space* the box is in – can Immy remove this?
- What would happen if Immy removed the space as well?
- What about the *time* the box is in – can Immy remove this?
- What would happen if Immy were able to remove time as well?
- Is the box in time?

Your Questions

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Works well with

✓ A Pageful of Nothing

✓ A Hole Load of Nothing

✓ Doughnut

✓ Empty

✓ Phil and Soph and the Ice Cream

✓ *Thoughtings:* Space, Time and Other Weird Things

✓ *The If Machine:* Thinking About Nothing

Source: Thanks to Ben Jeffreys and Claire Field for thinking of 'Kant's Box' as a way of introducing *a priori* space and time to classes.

Philosophy: Kant's *a priori* space and time.

A Hole Load of Nothing

David Birch

Starting age: 7 years

Mr and Mrs Owl had been married for many years. They

lived in the hole of an oak tree in a pleasant corner of the forest. They slept during the day and, when night fell, they would leave the hole to hunt for dinner.

Because owls are animals of the night they need very large eyes to help them see. Yet poor Mrs Owl was entering her twilight years and her eyesight wasn't what it used to be; so for the past few months she had needed to wear glasses when they went out searching for food.

But one night, when Mrs Owl was getting dressed, she forgot to put on her glasses and she left the hole without them.

'Oh dear, Mr Owl,' she said. 'I've left my glasses indoors. Be a darling and fetch them for me.'

'Right now?' asked Mr Owl hesitantly.

'Well, yes. I can hardly see a thing. I'll fly into a hedgehog,' chuckled Mrs Owl.

'Um …' mumbled Mr Owl and fell silent.

'*Hoot hoot*, come on, Mr Owl, don't dither.'

'Must I go? Can't you?'

'Really! What is wrong with you?' said Mrs Owl irritably.

'I'm just a little … scared.'

'Scared? Scared of what?'

'It looks terribly dark in there,' answered Mr Owl.

'Mr Owl, are you telling me you're afraid of the dark?'

There was a pause. ‘Yes.’

‘Mr Owl! How careless of you. How could you possibly be afraid of the dark?’

‘Please don’t be cross with me,’ pleaded the frightened owl.

‘But it’s our hole, our home. You know there are no scary things in there. What’s to be afraid of?’

‘The dark.’

Come now, Mr Owl. The dark is just what happens when there’s no light. It’s, it’s – just nothing,’ Mrs Owl explained.

‘Yes. Nothing. I’m scared of Nothing,’ said Mr Owl flatly.

‘You’re scared of nothing? Brilliant, you can fetch my glasses, then. Honestly, Mr Owl, sometimes you …’

‘No, no. You don’t understand. I am scared of something: I’m scared of Nothing.’

‘Well that doesn’t make sense, dear,’ said Mrs Owl, furrowing her brow. ‘You say one thing and then you say the opposite. Which is it?’

‘Both! Please, Mrs Owl, listen. I can’t go into the hole because it’s dark and full of Nothing and that frightens me.’

‘Oh now I see,’ said Mrs Owl, trying to play along. ‘Nothing scares you?’

‘Yes!’

‘So what are we arguing about?’

‘Nothing.’

‘Ex-actly,’ said Mrs Owl raising her wings. ‘My glasses are by the hat stand, I think.’

‘Oh my,’ sighed Mr Owl. ‘I can’t fetch your glasses. I can’t.’

‘And what is the problem?’

‘Nothing.’

‘Good – why must you go on and on like a parrot? You’re not a parrot, you know, Mr Owl. You’re an owl. Now hurry along.’

At the sound of the order, Mr Owl instinctively turned to go back into the hole – till he saw the blackness and remembered his fear. ‘But, no, the dark …’

And so the argument went on. Mr Owl kept insisting that he was scared of Nothing, and Mrs Owl kept telling him that was wonderful and ordering him to fetch her glasses. And the two owls are still sitting out there on the branch, arguing till this day, like a pair of parrots.

Start Question 1 If Mr Owl is afraid of the dark, then is he afraid of something or nothing?

Questions to take you further

- Is the dark nothing or something?
- **What is the dark?**
- Will Mr and Mrs Owl’s argument ever end?

- Is there anything nice about the dark?
- **What is fear?**
- Why are we often afraid of the dark?

Start Question 2 If Mr Owl is afraid of Nothing then is he afraid of something or nothing?

Questions to take you further

- Is nothing something?
- Is it possible to be afraid of nothing?
- Can nothing be scarier than something?
- **What is nothing?**

Your Questions

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Works well with

✓ Immy's Box

✓ Empty

✓ Doughnut

✓ A Pageful of Nothing

✓ The Sound of Silence

✓ *The If Machine:* Thinking About Nothing

✓ *Thoughtings:* A Disappearing Riddle

Philosophy: Logic, ontology, existentialism and anxiety, Kierkegaard, Heidegger, Sartre, Tillich.

The Sound of Silence

Peter Worley

Starting age: 7 years

Philosophical exercise: Read the following song lyrics and sing the well-known tune silently in your head. Don't sing it out loud! If you are with a class then conduct them and mouth the words silently so that the class is 'silently singing' together. (If it is somebody's birthday then silently sing 'Happy Birthday' to them!)

Happy Birthday

Happy birthday to you,

Happy birthday dear *somebody*,

Happy birthday to you.

By Anonymous

Start Question Have you just *heard* the song ‘Happy Birthday’?

Questions to take you further

- **What is hearing?**
- **What is sound?**
- Can sound exist if it is only in your mind?
- The composer Beethoven was completely deaf towards the end of his life. Can he be said to have *heard* the pieces he composed whilst deaf?
- If Beethoven had been deaf his whole life would you answer differently?
- Do you think he could have composed tunes like ‘Ode to Joy’ if he had been born entirely deaf?
- Do you have to have heard sound to imagine sound?
- The deaf musician Evelyn Glennie feels music by its vibrations. Can she hear music in this way?

Your Questions

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Works well with

✓ ‘Music To My Ears!’

✓ Green Ideas

✓ Said and Unsaid

✓ The Piano Music

✓ *Thoughtings:* Between My Ears

✓ *The If Machine:* Thinking About Nothing

Source: This was inspired by 7-year-old Elena who said ‘the music I hear in my head’ when the class was asked to think of more examples of things they might find in their head that are not physical such as ‘thoughts’ rather than ‘brain’. (This discussion was conducted around the *Thoughting*: Between My Ears.)

Philosophy: The phenomenology of sound, the ontology of sound/music.

A Heap of Exercises?

Peter Worley

Starting age: 7 years

Exercise 1

1. Make a heap of something such as books, pencils, beads, etc.

2. Now take one of whatever-it-is away. Is it still a heap?

3. Take another away. Is it still a heap?

4. Keep going until you think it is no longer a heap.

Start Question 1 When is it no longer a heap? And why?

Exercise 2

1. Put one book, pencil, bead, etc. on the floor. Is it a heap?

2. Put another of whatever-it-is on the floor with the other one. Is it a heap now?

3. Put another one on the others. Is it a heap now?

4. Keep going until you think you've got a heap.

Start Question 2 When will it become a heap? And why?

Questions to take you further

- **What is a heap?**
- At what point does a heap become a heap?
- At what point does a heap cease to be a heap?
- Can this puzzle be solved?
- When is it true that a heap is a heap and when is it false that a heap is a heap?
- Can it be neither true nor false?
- Can it be both true and false?
- Are the exercises on this page a heap of exercises?

Extension activity 1

1. Place a piece of A4 paper in front of you horizontally.

2. Draw a picture of a baby on the left hand side of the paper and then a picture of a child on the right hand side.

3. Draw a horizontal line between the baby and the child.

4. Place an X on the line where you think the baby becomes a child. Can you do it?

Extension activity 2

1. Start whispering.

2. Imagine that someone is turning you up as if they had a remote control with a volume switch that controls you.

3. Gradually get louder until your whisper has turned into a scream.

Start Question 3 When exactly does a whisper become a scream?

Extension activity 3

Start Question 4 Where is the edge of a cloud?

Questions to take you further

- What is a cloud made of?
- How would you find the edge?
- How would you know when you have found the edge of a cloud?

- When a cloud of steam comes out of a kettle where is the edge of the cloud of steam? (*Important:* Be very careful around steam from a kettle!)

- Does a cloud have an edge?

- When a cloud rains where does the cloud end and the rain begin?

- Is water or ice the same thing as a cloud?

Your Questions

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Works well with

✓ Tralse

✓ Phil and Soph and the Three-Legged Race

✓ The Txt Book

✓ Not Half the Man He Used To Be

✓ Zeno’s Parting Shot

Source: The Ancient Greek Sorites Paradox (*sorites* is Ancient Greek for ‘heap’); thanks to David Birch for the extension activities and 11-year-old Clarissa for the question ‘Where is the edge of a cloud?’

Philosophy: Vagueness, bivalence.

Across the River and Into the Trees

Angie Hobbs

Starting age: 9 years

The day after her ninth birthday party, Lucy felt that the celebrations should continue. ‘It’s still my birth week,’ she pointed out. As it was a beautiful warm Sunday in May, her mother suggested she invite two or three friends over, and that they would all prepare a picnic and take it to a bluebell wood nearby.

So they packed up a basket with pizza slices and chocolate cakes and strawberries and set off across the fields towards the bluebell wood. Just before they reached the wood, they had to cross a small river by an old wooden bridge, the water bubbling over smooth white stones and sparkling in the sun. They stopped for a few minutes to throw twigs into the river, to see whose stick would emerge first from under the bridge. Lucy (who was wearing boots) sat on the bridge and dipped a foot in the river, watching it swirl around her boots.

They ate their picnic beneath a huge, gnarled old oak tree, and then climbed the tree and laid a trail through the wood. Then they lay down and played games on their phones, the mother protesting. But they took no notice of her because they were happy.

Finally, they packed up the basket and returned home, crossing over the bridge again. All their sticks had long vanished, apart from one, which was still stuck in some

weed. Around the stuck twig, the water eddied and swirled.

Start Question 1 When they walk over the bridge, are they crossing the same river? If so, why? If not, why not?

The following year Lucy asked to repeat the picnic trip. This time they went after school, on the Monday. They went over the bridge (Lucy dangling her foot in the water again), and saw that part of the bank had crumbled away, probably in a recent storm. They ate under the oak tree and played with their new phone apps amongst the bluebells. The mother had given up protesting and everyone was happy. They returned home, stopping on the bridge to throw twigs into the water. The mother's twig emerged first.

Start Question 2 One year on, are they crossing the same river? If so, why? If not, why not?

Questions to take you further

- If you think it is the same river, then what makes it the same river?
- If you think it isn't the same river, then why (and how) do we still call it 'the river'?
- Why (and how) do we still give it the same name?
- How can we use stable words for unstable objects?
- Is the oak tree under which they picnic the same oak tree?

- Is Lucy the same person at 10 as she was at 9?

- If everything is always changing in at least some respect, then what (if anything) allows it to be the same thing?

- If everything is always changing, then how do identities – of a river, an oak tree, a girl – form in the first place? Perhaps there is just a swirl of change and no separate things?

- Does it make a difference how fast or slow the pace of change is?

- Does it make a difference if things are simply *liable* to change, rather than actually changing all the time?

- **What is change?**

Questions to take you even further

- This story is based on a paradox of the ancient Greek philosopher Heraclitus, who said that you couldn't step into the same river twice, because different waters were always flowing. His disciple Cratylus said that you couldn't step into the same river even *once*! In a world of extreme flux, identities cannot even form. We cannot, strictly speaking, talk of a 'river' at all.

- Do you agree with Cratylus?

- Can anyone agree with Cratylus using words? Or is he giving us a picture of the world in which language cannot exist? (Cratylus apparently gave up answering questions, and just sat there silently.)

Your Questions

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Works well with

✓ Identity Parade

✓ ‘Personal Identity’ section

✓ Pencil Person Meets Pencil Person!

✓ *The If Machine:* The Ship of Theseus

✓ *Thoughtings:* Flow

Source: The Pre-Socratic philosopher Heraclitus and his pupil Cratylus.

Philosophy: Identity, change/flux.

Dis-ingenious

Peter Worley

Starting age: 10 years Advanced

Ali had heard that if you rub magic lamps they release genies, and he had also heard that genies grant wishes to those who free them from the lamp.

Ali had been rubbing lamps for three weeks now, almost non-stop. He was very tired and bored and was about to give up when suddenly the lamp he had been rubbing started to glow. He dropped it with surprise, as he had long since given up thinking that such lamps existed. A blue smoke rose out of the lamp's spout and it was not long before he was looking at a genie sitting on top of a strange cloud that had formed above the lamp.

'I am the genie of the lamp,' said the genie in a booming, echoey voice, 'and I am the most *powerful* genie that you will ever have met.'

'Well, *yeah* … because you're the *only* genie I've ever met,' replied Ali facetiously.

'But even if you had met a thousand genies I would be *the most powerful*,' the genie continued to boast, 'because I am what's called "The Ingenious Genie of Omnipotence", which – by the way – means "all-powerful"…'

In fact, Ali had to listen to almost half an hour of how powerful the 'all-powerful' genie *powerfully* was and by the time the genie got around to telling him that he would grant wishes to whomever had released him, Ali was quite bored and irritated at all the boasting. He was also disappointed to discover that this genie would only grant *two* wishes when Ali had heard that genies grant *three*!

The genie came to the end of his long speech and then said, 'So, I will grant you two wishes. You can wish for anything

you want, and remember: nothing is impossible for The Ingenious Genie of Omnipotence!'

Due to his irritation at the excessive boasting, Ali came up with his own ingenious wishes that he knew would shut up the genie once and for all. *Genius!* he thought to himself.

'I wish …' said Ali with a mischievous sparkle in his voice, 'for you to create a mountain you cannot move.'

'Nothing's impossible for The Ingenious Genie of Omnipotence,' said the genie and he took his wish-granting pose. In an instant there was a huge mountain that stood imperiously before them both.

'Are you sure you can't move it?' said Ali.

'Yep!' assured the genie, though Ali noticed that he didn't seem to have tried. 'Now for your second wish,' urged the genie impatiently.

'Okay. For my second wish I wish …' – his eyes sparkled even more – 'that you move the mountain you just created!'

'But … but …' the genie looked confused.

'That should teach you not to be so boastful about something you're not!' said Ali. But then Ali realised that he had wasted his wishes ingeniously outwitting the genie and was left with no wishes for himself. Oh dear! Silly Ali.

Start Question If he can do anything, will it be possible for the all-powerful genie to grant both wishes? Here they are:

Wish 1: To create a mountain that the genie cannot move.

Wish 2: To move the mountain that the genie just created.

Questions to take you further

- Is nothing impossible for the genie?
- Is nothing impossible?
- What does Ali mean when he says to the genie that he shouldn't boast about something he's not? What is it that he's not?
- Has Ali thought of something that is impossible for the genie?
- Has Ali proved that the genie was not omnipotent after all?
- Can you think of something that is definitely impossible?
- What would happen if the genie was able to grant the wish?
- What would happen if the genie was unable to grant the wish?
- 'For nothing is impossible with God' (Luke 1:37). Discuss.

Your Questions

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Works well with

✓ 'Time' section

✓ Some Sums with Zero

✓ Itselfish

✓ Tralse

✓ Just Testing!

✓ *Thoughtings:* Impossibling and More Impossiblings …

Source: Ibn Rushd (known in the west as Averroes) and the paradox of omnipotence.

Philosophy: Philosophy of religion, logical possibility.

Just Testing!

Peter Worley

Starting age: 9 years Advanced

Imagine that before God had created anything at all he decided, first of all, to create just one thing. He decided to create a planet, just to test out his creation skills. So he did: *kazoom!*

Start Question 1 Is the planet that God has created big?

Questions to take you further

- How big is big?

- What determines something’s size?
- What is size?
- Can something be big in itself?
- Does size depend on comparison?
- If there’s nothing to compare the planet to then what size would it be?
- What size would God be?
- Is big big?
- Is there anything that’s just big and never small?

Your Questions

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Works well with

✓ Dis-ingenious

✓ The 2 Square

✓ What Zeus Does When He’s Bored

✓ *The If Machine:* The Shadow of the Pyramid

✓ *Thoughtings:* Number Wonders

Source: This thought experiment was introduced in a discussion with

some 11-year-olds about whether numbers are invented or discovered.

Philosophy: Relational concepts, the nature of number.

A Pageful of Nothing

Sophia Nikolidaki

Big Question

Choose a question, any question from this page. Can you answer it? (Alternatively, you could choose a number randomly between 1 and 21 and then try to answer the question.)

Start Questions

1. Can something be full of nothing?

2. Does nothing exist?

3. Is there a place of nothing?

4. Can you ever really mean that ‘you are doing nothing’?

5. What does ‘nothing’ mean?

6. Is there anything that could replace nothing?

7. Is nothing just a word? In that case can we insist that ‘there is nothing there’?

8. Can a sound ever fade into nothing?

9. Is zero nothing?

10. Can you draw nothing?

11. Can nothing ever be useful?

12. Why do we use the word nothing to praise something? (e.g. How does the sentence ‘there is nothing better than a good cup of tea’ make sense?)

13. Can somebody/something be nothing?

14. Can you feel/think/do nothing?

15. Do ‘being unimportant’ and ‘being nothing’ mean the same thing?

16. What was before nothing?

17. What comes after nothing?

18. Is a hallucination a form of nothing?

19. Can you hide nothing(ness)?

20. Is hiding fading into nothing?

21. Is there anything less than nothing?

Are there any more *nothing-questions?* Can you continue to fill the page?

Your Questions

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Works well with

✓ Immy’s Box

✓ A Hole Load of Nothing

✓ Doughnut

✓ Empty

✓ *The If Machine:* Thinking About Nothing

✓ *Thoughtings:* A Disappearing Riddle, Where’s Mr Nobody?

Philosophy: The Pre-Socratic philosopher Parmenides and nothingness, Sartre, Heidegger.

BURIDAN’s Asteroid

Robert Torrington

Starting age: 9 years

For 3,141 years the Benevolent Universal Research, Identification, Definition and Navigation computer (BURIDAN, for short) had guided what remained of the human race through space in its search for a new world. Its advanced mathematics, faultless reasoning and perfect logic had kept the human race safe for millennia.

But one day, BURIDAN stopped the ship.

Exactly 100 light-years to the left was an asteroid so large that it would be suitable for human life. But exactly 100 light-years to the right was a second asteroid identical to the first.

Each one was the same shape and the same size. Each was the same distance away. They were identical. In fact, if they hadn't been in two different places, you would have thought they were the same object. With no difference between the choices, and it being impossible to go in both directions at once, BURIDAN had no reason to choose one or the other. So the ship stopped.

The crew asked BURIDAN why the ship had stopped, and were told exactly what had happened.

'Just choose one, BURIDAN,' they requested.

'How will I choose?' BURIDAN replied.

'It doesn't matter – just pick one, left or right.'

'My programming permits me only to act in accordance with reason. I am free only to do what is logical. There is no reason to choose one or the other. I would be acting illogically if I choose either.'

'But it's ridiculous to sit here and do nothing. If you don't move eventually, we'll be stuck here forever.'

'Nevertheless, there is no logical way to decide.'

Start Question Is there a logical way to decide?

Questions to take you further (according to themes)

Logic and reason

- What is acting logically?

- **What is logic?**
- **What is reason?**
- Was BURIDAN right to stop?
- How should BURIDAN decide what to do?
- Do we think like BURIDAN?
- Are we logical, illogical or non-logical (what's the difference between illogical and non-logical?)?
- Which would you rather be: logical or illogical?
- How important is being logical?

Freedom and thought

- BURIDAN can only do what is logical; is BURIDAN free?
- Are you free if you only do what is logical?
- When are you free?
- Are we free?
- **What is freedom?**

Identity and physics

- Is it possible for two things to be identical?
- **What does 'identical' mean?**
- Can one thing be in two places at once?

- Are some twins identical?
- Is ‘1 + 1’ identical to ‘2’?
- Are you identical to you?

Your Questions

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Works well with

Freedom and logic:

✓ Other entries in the ‘Freedom’ section

✓ Charlie’s Choice

✓ Negative Nelly

✓ The Accidental Confession

✓ Trying to Forget

✓ The Traffic Light Boy (3)

✓ *Thoughtings:* Minds and Brains and Are You Free?

✓ *The If Machine:* The Lie, The Frog and the Scorpion

Identity:

✓ Pencil Person Meets Pencil Person!

✓ The Copying Machine

✓ Identity Parade (3): Body Copy

✓ Across the River and Into the Trees

✓ *The If Machine:* The Ship of Theseus, The Rebuild

✓ *Thoughtings:* Flow

Source: The story of Buridan's ass, in which a donkey was unable to choose between two clumps of grass at equal distance from the donkey. The donkey starved to death! The story was invented to make fun of Jean Buridan's philosophy of free will.

Philosophy: Buridan's ass, logic, Leibniz and 'Leibniz's Law', identity, the identity of indiscernibles.

Phil and Soph and the Ice Cream

Philip Cowell

Starting age: 5 years

Sitting out the back, in the last of the sun, at the end of another long day of play, Phil and Soph were enjoying some quiet time with bowls of ice cream. 'This is so delicious!' Phil said, as he took a big scoop and lifted it to his mouth. Soph had a full spoonful herself. 'I know!' she said. 'I would love to have a chocolate ice cream *that's blue*!'

Phil thought for a second and then said, 'I would like to try an *ice-cream-flavoured* ice cream.'

Sensing a competition, and after having had another mouthful of delicious ice cream, Soph said, ‘I want an ice cream with *no flavour*!’

Start Questions

1. What would a blue chocolate ice cream taste of?

2. What would an *ice-cream-flavoured* ice cream taste of?

3. Would it be possible to have an ice cream with *no flavour*? (Is there *any* kind of food or drink with no flavour?)

Phil looked even more thoughtful now, and a bit of thinking time later he said, ‘I wonder if there’s such a thing as something with no taste, no smell, no colour, no sound and no feel.’

They both fell into silence as they thought about Phil’s question whilst slurpily finishing off their ice cream.

Start Question 4 Can you think of something (not just food but *anything*) with no taste, no smell, no colour, no sound and no feel?

[*Try to answer Start Question 4 before considering the suggestions below*.]

What about:

1. Water?

2. Air?

3. Words?

4. Emotions (such as love, anger, etc.)?

5. Thoughts?

6. Nothing (as in ‘nothingness’)? Question: Is nothing something? Can you think of anything else?

Questions to take you further

- Why does anything taste of anything?

- Does ice cream have colour?

- Could you have an ice cream that has no colour?

- Could you have an ice cream that has no colour, no taste, no sound and no feel?

- Pretend you’re Phil and you want to have an ice cream as philosophically interesting as Soph’s. What would your ‘philosophy ice cream’ be?

Your Questions

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Works well with

✓ Other Phil and Soph stories

✓ Who’s the Philosopher?

✓ Bat-Girl

✓ Rose-Tinted Speculations

✓ More Colour Conundrums

✓ The Duck and Rabbit

Philosophy: The philosophy of colour and taste, qualia, the nature of thinking, paradoxes.

The Philosophical Adventures of Pencil Person

These sessions may well blend into each other as there is a good deal of overlap between the ideas. For instance, if the discussion in ‘Introducing Pencil Person’ turns towards the distinction between *types* and *individual things* then run ‘Pencil Person Meets Pencil Person!’ to help focus this.

Introducing Pencil Person

Peter Worley

Starting age: 7 years

Props: Four (or eight) pencils, a book, a ball (or any objects that can function as a ‘head’ and a ‘body’) – Pencil Person should have pencils, though, to be ‘Pencil Person’.

Assembly instructions: Take four (or eight) pencils, a book and a ball. Place the book on the floor so that the book is facing you the right way up. Now place the pencils at the corners of the book to make arms and legs. Finally, place the ball at the top to make a head.

(For younger ones, before, during or after assembling Pencil Person, read or recite the poem ‘Pencil Person’).

***Thoughting*: Pencil Person**

I’m a person all made of pencils
Well, maybe not quite *all*
I’ve pencils for arms and legs
A book for a body
And my head is a ball.

So, here’s a question for you
To get you chewing *your* pencils:
How many things am I?
Am I *One* or *Many?*
Though clearly made of utensils.

Start Question How many things are there here (point to the assembled Pencil Person on the floor)?

Questions to take you further

- Is Pencil Person one thing?
- Is Pencil Person many things? If so, how many?
- Is Pencil Person a person?
- How many different answers can you give to the Start Question above?
- Is there one thing *and* many things? At the *same time*?
- **What is a ‘thing’?**
- **What is an ‘object’?**
- Do the parts need to be connected to be one thing?
- Does it just depend on how we see it?
- Can someone be wrong about how many things there are?
- The philosopher Aristotle said, ‘The whole is different from the sum of its parts.’ What do you think he meant by this?

Your Questions

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Works well with

✓ Just Testing!

✓ The 2 Square

✓ Some Sums with Zero

✓ A Knife Idea

✓ Disappearing Pencil Person

✓ Pencil Person Meets Pencil Person!

✓ How Many Dogs?

✓ A Heap of Exercises?

✓ *Thoughtings:* Number Wonders

Source and Philosophy: Mereology, Aristotle and the problem of one-over-many.

Disappearing Pencil Person

Peter Worley

Starting age: 9 years

Note to teacher: If running this with a class you could perform the trick similarly to the magician rather than read the story.

The Magician says that he is going to make Pencil Person disappear: 'No – not just *disappear*,' says the Magician, 'I'm going to make Pencil Person *no longer exist*!' There is a collective intake of breath from the audience.

A drum begins to roll. The lights dim. The excitement of the audience can be felt by everyone. Then the Magician

suddenly puts Pencil Person in a cloth bag and, in clear sight of the entire audience, he takes the bag out of the room and places it on the floor outside. He then comes back into the room, closes the door, rushes back onto the stage and says – whilst doing 'jazzy hands' – 'T'dah! *Pencil Person no longer exists*!'

After a shocked silence someone in the audience says, rather tentatively, 'But you just put Pencil Person in a bag then placed him on the floor outside the room.'

'Yeah, so?' replies the Magician to his disappointed audience.

'Well, Pencil Person *does* still exist, he's just *not in the room any more*,' says the disgruntled audience member.

The Magician begins to look irritated and he turns to the objector and says indignantly, 'You tell me then: how else can you make Pencil Person no longer exist?'

Start Question 1 What can be done to make Pencil Person no longer exist?

Questions to take you further

- Would burning or blowing up the pencils, the book and the ball do the trick?
- Is it possible to make something *no longer exist*?
- Can something exist in our memories?
- If something has existed at one time does that mean it will exist for all

time, whatever happens to it?

- What if something *doesn't exist yet?* Does it not exist?
- Can you make something exist that doesn't exist now? If so, what?

After a while of arguing about whether Pencil Person still exists or not, the Magician has an idea. He leaps to his feet and brings the bag back into the room. He removes all the pencils, the book and the ball from the bag and proceeds to place each of the pencils in different people's pencil-cases that are in different parts of the room. He puts the book on a bookshelf among many other books and the ball into a box full of different kinds of balls.

'There!' he says, 'Now *surely* Pencil Person no longer exists!'

Start Question 2 Has the Magician done it? Has he made Pencil Person no longer exist?

Questions to take you further

- How do something's parts have to have been arranged for it to exist?
- If the parts still exist, does that mean that the thing the parts made up still exists?
- **What does 'exist' mean?**
- Is the man a magician?
- If you were to make a paper aeroplane, fly it across the room and then unfold it again, would the paper aeroplane still exist? Try it.

Your Questions

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Works well with

✓ A Knife Idea

✓ Doughnut

✓ A Heap of Exercises?

✓ ‘Personal Identity’ section

✓ Introducing Pencil Person

✓ Pencil Person Meets Pencil Person!

✓ The Time Diet

✓ *The If Machine:* The Chair, Get Stuffed, To the Edge of Forever

✓ *Thoughtings:* Space, Time and Other Weird Things

Source: Ibn Sina (Avicenna) and necessary and contingent existence – inspired by part of his ‘proof’ for the existence of God.

Philosophy: Ontology, existence, concept of a thing.

Pencil Person Meets Pencil Person!

Roger Sutcliffe

Starting age: 5 years

Follow the instructions on pages 41–42 to construct *two* Pencil Persons, next to each other, so that they appear identical.

Start Question Are they the same or different?

Questions to take you further

- Are they the same *sort* of thing?
- How many different ways can they be different?
- Why, if they are different in so many ways, do people agree that they are, after all, the same sort of thing?
- Can you look around and identify two things that are different *sorts* of things, but are ‘the same’ in at least one way?
- Can different things be the same in any way? If so, how?
- What makes something the same?
- What exactly does ‘same’ mean? What exactly does ‘different’ mean?

Your Questions

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Works well with

✓ Introducing Pencil Person

✓ Disappearing Pencil Person

✓ ‘Personal Identity’ section

✓ How Many Dogs?

✓ The Duck and Rabbit

✓ Across the River and Into the Trees

✓ Pinka and Arwin Go Forth: Making Up Their Minds

✓ *The If Machine:* Yous On Another Planet, Can You Step in the Same River Twice?

Philosophy: Identity, type and token identity, universals and particulars, Plato and Forms.

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1 See *The If Machine: Philosophical Enquiry in the Classroom* by Peter Worley (Continuum, 2011).

2 *Thoughtings: Puzzles, Problems and Paradoxes in Poetry to Think With* by Peter Worley and Andrew Day (Crown House Publishing, 2012).

Thoughting: A Birthday Surprise!

Peter Worley

Starting age: 7 years

I can travel backwards
Or keep going straight
I can go sideways;
Left or right.

But can I go *through* time
Forwards or backwards;
Do you think
that I might?

I wish I could
Coz then I would
Say ‘Hello!’ to my mummy

But for a birthday surprise
I would say ‘Hello!’
just *before*
I popped out from her tummy!

By You (see A Poem By You? on page 58 to see how)

Start Question Would it be possible, with a time machine, to travel to a time before you were born?

Questions to take you further

- Do you think we could travel through time like we travel through space, forwards and backwards, left and right?
- What would it be like to travel left or right through time? Do you think it would be possible?
- Would travelling to a time before you were born lead to a contradiction (i.e. that it is both true *and* false that you have not yet been born)?
- Will a time machine one day be built or would a time machine be impossible?
- Would it be possible, with a time machine, to meet yourself?
- If you did meet yourself when you were younger, what might you say to your younger self? Would you have any advice?

Your Questions

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Works well with

✓ A Poem By You?

✓ Itselfish

✓ The Non-Existent Hero

✓ The Girl from Yesterday

✓ *Thoughtings:* Space, Time and Other Weird Things

Source and Philosophy: The philosophy of time travel, David Lewis' paper 'The Paradoxes of Time Travel'.

The Time Diet

Peter Cave

Starting age: 10 Years Advanced

Start Question 1 (to think about before reading the story): Do the past and future exist?

Samantha says, 'The past does not exist – after all, it is past, well past. It no longer exists. You can only have memories of it.'

Stanley says, 'The future does not exist – after all, it is future, so very future. It is not yet in existence. You can only guess what will happen.'

Sue says, 'Well, at least the present exists – and I live in the present. So that is all right.'

'Hold on,' say Samantha and Stanley, 'how long in time is the present? If it has any length – one hour, one minute, one

second – then some of it must be in the past or in the future. So, how long is *now*?'

Start Question 2 How long is *now*?

Questions to take you further

- What is *now*?
- Where is *now*?
- Is *now* always moving or is *now* still?

'That's okay,' replies Sue, but now feeling very squeezed by time, getting thinner and thinner in time. 'The present is an instant, the line between past and future.'

'Ah hah,' chorus Samantha and Stanley. 'The future does not exist; the past does not exist. So, the present is just a line between things that do not exist. But that is impossible. How can there be a line, a boundary, a fence, between what does not exist?'

Sue feels herself getting thinner and thinner at this thought – so thin that she vanishes into nothing.

Start Question 1 (again): Do the past and future exist – as well as the present?

Questions to take you further

- What reasons can you give for why the past, the present and the future don't exist?
- Does the past exist, but not the future?
- How long does the present – does *now* – last?
- If the past does not exist, how can you have a memory of it?
- What is time like? How does it move? What is its shape? What does it do?

Your Questions

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Works well with

✓ Other entries from the 'Time' section (particularly Time-Stretching, The Time-Freezing Machine, The Time Machine, The Girl from Yesterday)

✓ Empty

✓ *Thoughtings:* From Me To You and Space, Time and Other Weird Things, especially Petering

Philosophy: Philosophy of time, St Augustine and presentism, McTaggart and static and dynamic time.

Empty

Peter Worley

Starting age: 7 years

Imagine an emptiness. There's nothing in the emptiness, just … emptiness!

Start Question 1 Is there *time* in the emptiness?

Questions to take you further

- If nothing happens in the emptiness, is there time?
- If nothing changes in the emptiness, is there time?
- **What is time?**
- **What is change?**
- Is time something different from change?
- The philosopher Aristotle thought that 'time is the measurement of change'. Do you agree with him? If no change happens in the empty space, then would Aristotle think that there is time or not?

Start Question 2 Is there *space* in the emptiness?

Questions to take you further

- If there is nothing *in* space, then is there space?
- **What is space?**

- What would the world be like if there wasn't any space?

- The scientist Isaac Newton thought that there *would* be space in emptiness because space would be needed if there was something to put in it. The philosopher Gottfried Leibniz thought that there *wouldn't* be any space in emptiness because there is only space when there is something for there to be a space between. Who do you agree with and why?

- The philosopher Immanuel Kant thought that there would only be time and space if there was someone to *think of them*. Do you agree or disagree?

Your Questions

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Works well with

✓ The Time Diet

✓ Immy's Box

✓ Doughnut

✓ A Hole Load of Nothing

✓ A Pageful of Nothing

✓ *The If Machine:* Thinking About Nothing

✓ *Thoughtings:* Space, Time and Other Weird Things, especially Space

Source and Philosophy: Aristotle on time, Newton and absolute space, Leibniz and relational space, Kant and *a priori* space and time, Sydney Shoemaker's 'Time Without Change'.

Superbaby Time!

Peter Worley

Starting age: 7 years

Superbaby is a superhero with super-powers but with the mind of a child. One day Superbaby is playing a computer game and he super-loses. He gets super-angry and wants to play again. Instead of just pressing 'restart game' on the controls he decides that he wants to make time go super-backwards so that he can play the game again but this time not super-lose! He flies up to the very top of Mount Everest, grabs hold of the mountain and uses his supreme super-strength to make the Earth revolve in the opposite direction so that he can make time go in the opposite direction too.

Start Question If the world were spun in the opposite direction would this make time go backwards?

Questions to take you further

- Does time move?
- Does the earth's movement cause the movement of time?
- What do you think makes time move?

- What do you think would happen if the world suddenly spun the other way?

- Clearly Superbaby has super-strength but does Superbaby have super-reasoning skills as well? Is Superbaby super-right or super-wrong when he reasons that if the world spins backwards, time will go backwards?

Your Questions

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Works well with

✓ Empty

✓ The Telly-Scope

✓ The Time-Freezing Machine

✓ Time-Stretching

✓ The Big Time Experiment

✓ The Time Machine

✓ *Thoughtings:* Space, Time and Other Weird Things

Source: The film *Superman* directed by Richard Donner.

Philosophy: The direction of time.

The Telly-Scope

Peter Worley

Starting age: 11 years

Lilly loves to watch her favourite soap opera *The Zargonians*. She laughs and cries with the characters as she sees their lives unfold. Sometimes it is boring and sometimes it is exciting and sometimes it is very sad. But Lilly lives in a time when soap operas are very different from how they were in your time – a time in the far future from you. They don't use actors because they don't need to. What they do is point a very powerful telescope at a distant planet and they simply watch the lives of the inhabitants of the planet in their homes on what they call a 'Telly-Scope'. Viewers learn the languages and study Zargonian culture at school. It is much more than a soap opera but people watch it and enjoy it like one.

When one of the main characters, a Zargonian boy called Noob, is very sad because of something that happens in his family, Lilly wants to contact him to comfort him. She asks her mum, 'Can I contact the Zargonians? After all, they are real aren't they?'

Her mother looks at her and says, 'Yes, they are real … in a manner of speaking …' She has a concerned expression on her face.

'What is it, mummy?' says Lilly.

'There's something I need to tell you but I'm not sure how to

explain it.'

'Tell me what?' asks Lilly.

'Well,' begins her mother, 'if you look at the sun you actually see the sun, not as it is now, but as it was eight minutes ago.'

'That's weird. But how?' asks her daughter.

'It's because light travels at a certain speed. It's very fast, travelling at 299,792,458 metres per second. But the sun is so far away that it takes light travelling at that speed *eight minutes* to get here. That's why we see the sun as it was eight minutes ago.'

Lilly thinks for a moment then says, 'So if I want to see the sun as it is right now I would have to wait for eight minutes?'

'That's exactly right,' says her mother. 'We say that the sun is "eight light-minutes away" because it takes the light from the sun eight minutes to get here,' her mother finishes. Then she adds, 'But remember, Lilly: *you must never look at the sun directly* – it could blind you!'

'But what's that got to do with *The Zargonians*?' asks Lilly, not really listening to her mum's warning.

'The thing is, Lilly: Zargonia is over *ten million light-years away*.'

'So, let me see …' says Lilly thoughtfully as she looks up and holds her chin, 'that means …

[*Before reading on: what do you think it means?*]

… that if "eight light-minutes" means that it takes light eight

minutes to reach Earth then “ten million light-years” must mean …’ – Lilly’s face darkens as she realises what it means – ‘… that it takes light *ten million years* to reach Earth. But that must mean that what I watch on the Telly-Scope isn’t happening now at all.’

‘That’s right Lilly,’ says her mother, trying to reassure her.

‘It must have happened ten million years ago,’ says Lilly. ‘When I watch my favourite soap opera I’m peering into history.’

‘I suppose you’re right,’ says her mother, slightly startled. She hasn’t thought of it like that before.

Lilly is quiet and thoughtful for a few days. She feels very sad, as if there has been a death in the family, even though the people in *The Zargonians* have died millions of years ago. But then she has an idea that brightens her mood. It occurs to her that when she watches *The Zargonians* she travels through time using the miracle of the speed of light … and the Telly-Scope.

Start Question Is watching *The Zargonians* a form of time travel?

Questions to take you further

- Are you time travelling every time you look at the sun (though, remember it is dangerous to look at the sun directly!)?
- Some stars are so far away that we are still seeing their light even though they no longer exist. When you look at old, dead stars, is that time travel?

- If it is not time travel, are you at least ‘peering into the past’ as Lilly said?
- Is Lilly right to feel sad about her discovery that the Zargonians lived a very long time ago?
- Will it change the way she watches *The Zargonians?*

Your Questions

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Works well with

✓ Superbaby Time!

✓ Empty

✓ The Time-Freezing Machine

✓ Time-Stretching

✓ The Big Time Experiment

✓ The Time Machine

✓ *Thoughtings:* Time, Space and Other Weird Things, particularly Light from Stars

Source: Einstein’s theory of relativity.

Philosophy: The philosophy of time travel.

A Poem By You?

Peter Worley

Starting age: 10 years

One day, whilst you are minding your own business watching the TV in your bedroom, something very strange happens. There is a weird distortion in the air in the middle of the room. Then, through the distortion steps a person. It appears to be some kind of doorway. Odd as it may seem, it's nothing compared to who it turns out the person is. For the person is you.

They explain that they are from the future. You are being visited by a *future you*. They hand you a piece of paper. On it is a poem called 'The Birthday Surprise'. Then they say, 'You must copy this into your own handwriting so that you can win a poetry competition. If you do, then you'll be a famous poet when you grow up … like me!'

'But where did *you* get it from?' you ask your visitor.

'I got it from the book that published the winning entries from the competition. You're in loads of poetry books in the future,' the other you replies.

'But where did *they* get it from?' you ask.

'They got it from you, of course!' explains the future you. 'It's your poem after all. Or it *will be* if you enter the competition. Sorry, I've got to go before the time portal closes again!'

The future *you* steps back through the doorway – or time portal, as they called it – and then the distortion fades leaving you dumbfounded at what has just happened to you. As instructed by … *you*, you sit down, take out a piece of paper and quickly copy the poem down in your own handwriting:

The Birthday Surprise

I can travel backwards
Or keep going straight
I can go sideways;
Left or right.

But can I go *through* time
Forwards or backwards;
Do you think
that I might?

I wish I could
Coz then I would
Say ‘Hello!’ to my mummy

But for a birthday surprise
I would say ‘Hello!’
just *before*
I popped out from her tummy!

Start Question Who originally created the poem ‘The Birthday Surprise’?

Questions to take you further

- Has anyone created the poem?
- Is it possible for the poem to have come from nowhere?
- Does this story lead to a paradox (an impossible situation) or do you think it could make sense?
- Does this scenario prove that time travel is not possible?
- If not, then how would time travel make sense of situations like this one?
- If you win the competition, would you have cheated?
- Who should win the competition?

Your Questions

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Will work with

✓ The Birthday Surprise

✓ The Non-Existent Hero

✓ The Butterfly Effect

✓ The Girl from Yesterday

✓ Philosophical Poetry

✓ *Thoughtings:* Archaeology and Anthology of Unwritten Poems

Source: Short story ‘The Muse’ by Anthony Burgess.

Philosophy: The philosophy of time travel, David Lewis’ paper ‘The Paradoxes of Time Travel’.

The Time-Freezing Machine

Peter Worley

Starting age: 7 years Advanced

Professor Timothy Tempo has created a time-freezing

machine. He takes his machine into a school to demonstrate it. He explains to the children that he can freeze time with his new machine. He turns to the class and asks them to give him a length of time for him to programme into the machine. The first child to speak says, ‘Five minutes?’

‘Is anyone here feeling more adventurous than that?’ says the Professor.

Another hand goes up. ‘An hour,’ says an unsure voice.

More hands go up.

‘A day.’

‘A week.’

‘A year.’

‘Ten years!’

‘A hundred years!’

‘A million years!’

‘Okay,’ says the Professor. ‘Now we’re ready to try the machine. Let’s freeze time for *one million years*.’

Some of the children look a little worried. He inputs the correct data into his time-freezing machine. ‘When I press the red button on my machine,’ explains the Professor, ‘time will freeze for *one million years*.’

Some of the children hold each other’s hands. The Professor leans forward and presses the red button …

Start Question 1 What do you think will happen?

Questions to take you further

- If time freezes for one million years, how would the children know if it has happened?
- Will they know?
- Will anything be different?
- Would they be any older?

Once his finger releases the button, Professor Tempo looks up and smiles to his audience. ‘So, how did that feel?’ The crowd look more than a little confused. No one says a word. The only sound is the clock ticking on the wall. Then, a girl in the audience bravely raises her hand. ‘But, Professor, nothing has happened … everything is the same. Time has just kept on going.’

‘No it hasn’t,’ the Professor replies. ‘It’s been stopped still for one million years.’

‘But I can’t tell any difference!’ exclaims the girl, frustrated.

‘Well,’ muses Professor Tempo. ‘How would you tell?’

Start Question 2 How would you tell if time has stopped?

Questions to take you further

- How do we know time isn’t stopping all the time?
- If nothing changes, could you still think?
- **What is time?**
- What would have happened to the world outside the classroom?
- Does the idea of a time-freezing machine make sense?

Your Questions

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Works well with

✓ Empty

✓ Superbaby Time!

✓ Time-Stretching

✓ The Big Time Experiment

✓ The Time Machine

Source: Martin Cohen’s *101 Philosophy Problems*. Thanks to Rob Torrington for part 2 of this entry.

Philosophy: The philosophy of time, Sydney Shoemaker’s ‘Time Without Change’.

Time-Stretching

Peter Worley

Starting age: 5 years

Little Timmy is excited about tomorrow because tomorrow is Timmy's birthday. But this week time seems to have slowed right down. Each day that he gets closer to his birthday seems to stretch out longer than the day before it. *How can that happen?* he thinks to himself, *how is it that time seems longer some days and shorter on others?*

Start Question 1 Does time slow down sometimes and speed up at other times?

Questions to take you further

- How fast does time go?
- Does it change speed?
- Imagine two children are playing together and one of them is having a lot of fun. For her an hour seems to take ten minutes. But the other child is bored – the same hour seems to take two! Is time moving at different speeds for each child?

The night before his birthday Timmy goes to bed and he thinks to himself, *I can't wait until tomorrow! I wish I had a time machine so I could get to my birthday quicker*. But then

it occurs to him that he *does* have a time machine. All he has to do is go to sleep and he'll wake up in what seems like five minutes with his birthday finally arrived! … All he has to do is go to sleep!

Start Question 2 If Timmy manages to go to sleep, when he wakes up will he have time travelled as if he were in a time machine?

Questions to take you further

- Is sleep a kind of time machine? If so, why? If not, why not?
- **What is a time machine?**
- If a time machine existed what would it be like?
- Do you think Timmy will get to sleep?
- Is time something that happens in the mind or outside of it?

Your Questions

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Works well with

✓ The Time Diet

✓ Empty

✓ Superbaby Time!

✓ The Time-Freezing Machine

✓ The Big Time Experiment

✓ The Time Machine

✓ The Girl from Yesterday

Source: This thought experiment was inspired by 8-year-old Rokas who wondered if time travels at different speeds for people having fun and those who are bored.

Philosophy: The phenomenology of time.

The Non-Existent Hero

Peter Worley

Starting age: 11 years Advanced

Herbert was a hero to all humankind but there was a small problem. Herbert didn't exist. Here's why.

Herbert's grandfather wasn't a very nice man and he did some rather bad things to a lot of people. He was also very, very rich. Herbert hated his grandfather for what he had done to so many people. When his grandfather died at the age of 80 Herbert inherited a great deal of money from him. He used the money to invest in the invention of the first ever time machine. Once it was built he travelled back in time and sought out his grandfather as a young man, at a time before he had done any of the many terrible things Herbert knew he would go on to do.

Herbert hid himself in a park opposite his grandfather's house, prepared his rifle and waited for him to emerge. Later that day, as his grandfather stepped out of the house, Herbert lifted his rifle and pointed it at him. With his grandfather firmly in his sights he paused as the tragedy of his situation dawned on him. Yet, despite this, he decided that his own tragedy was a price worth paying for what he was about to do for humankind.

He pulled the trigger.

And that's why Herbert doesn't exist.

Start Question Can you explain why Herbert doesn't exist?

Questions to take you further

- Does this story make sense? Could the events in this story have happened?
- Some people think that situations like this prove that time travel is impossible. Do you agree?
- Why is Herbert's situation tragic?
- Is ceasing to exist a price worth paying for ridding the world of a very bad person?
- This story is an example of a 'temporal paradox'. What is paradoxical about the story?
- **What is a paradox?**

Your Questions

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Works well with

✓ The Birthday Surprise

✓ A Poem By You?

✓ Dis-ingenious

✓ Itselfish

✓ *Thoughtings:* Puzzles and Paradoxes

Source: David Lewis' paper 'The Paradoxes of Time Travel'.

Philosophy: The philosophy of time travel, time travel paradoxes.

The Big Time Experiment

Peter Worley

Starting age: 7 years

All the governments of the world have decided to try a huge experiment with time. In fact, it's the biggest experiment that's ever been done. At exactly 12 o'clock mid-day on the twelfth day of the twelfth month of the year 2112 all the clocks of the world are to be stopped. The scientist behind

this huge operation, Professor Timothy Tempo, believes that when this is done time itself will stop.

Start Question 1 Is the Professor right – will time itself stop when all the clocks in the world are stopped?

There is a second part to Professor Tempo's big experiment. After all the clocks have been stopped, he is then going to have all the clocks in the world moved back by an hour simultaneously. He says that once this has been done the entire world, and therefore everyone on it, will have travelled back in time by one hour.

Start Question 2 Is the Professor right – will moving all the clocks back by an hour mean that everyone will have travelled back in time by an hour?

Questions to take you further

- Clocks were invented by humans, so was time invented by humans too?
- Do clocks make time move? If not, what makes time move?
- What was time like before clocks were invented?
- Would time have felt different before clocks were invented?
- Without clocks, how would you know what time of day it is?
- **What is time?**

- Does this experiment need to be performed for us to know whether Professor Tempo is right or wrong? Or can we know what will happen just by thinking about it?

Your Questions

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Works well with

✓ Superbaby Time!

✓ The Telly-Scope

✓ The Time-Freezing Machine

✓ Time-Stretching

✓ The Time Machine

✓ The Girl from Yesterday

✓ The Pill of Life

Source: This thought experiment emerged from discussions with many primary school children about crossing different time zones.

Philosophy: The nature of time, the distinction between time and the measurement of time or ‘clock time’.

Thoughting: The Time Machine

Peter Worley

Starting age: 7 years

I really could do with a time machine
I'm late for class: *it's history*!
When time is lost
Is it gone forever?
Or can we get it back
With a little endeavour?

But wait a minute
I *do* have one!
And I'm travelling in it
One second at a time.
Just think about it,
Don't look at me oddly,
My time machine is,
Well, it's my … body!

Start Question Is your body a time machine?

Questions to take you further

- Does your body travel through time?
- Is time outside of your body or inside your mind?
- Can you name the three dimensions? Is time a dimension?
- If your body is not a time machine, then what is a time machine?

- What does the poet mean when he/she says, ‘I’m late for class: *it’s history*!’? Is it a history class they are going to?

Your Questions

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Works well with

✓ Superbaby Time!

✓ The Telly-Scope

✓ Time-Stretching

✓ The Big Time Experiment

✓ Tralse (first half)

✓ *Thoughtings:* From Me to You

Source: This came out of discussions with primary school children, some of whom made a similar suggestion themselves.

Philosophy: The nature of time travel.

The Girl from Yesterday

David Birch

Starting age: 7 years

It had been the most beautiful day of her life. To celebrate her birthday Jessica and her friends had taken a trip to a village by the sea. The sun was shining and the world was everywhere in colour.

They had visited a stables and hired horses. For hours they rode together along the shore, galloping through the sand, laughing with excitement. They rode the horses through the shallow water and became dripping wet as the ocean splashed wildly over them. They rode to exhaustion.

Later, Jessica and her friends walked into the village. They discovered a sweet shop that filled the entire street with the crazed, heart-dancing smell of sugar. They rushed in. Behind the counter an old man was weighing sherbet lemons.

‘Guess what, mister?’ Jessica said boastfully. ‘It’s my birthday!’

‘Is it really?’

Jessica and her friends nodded with conviction.

‘Well in that case,’ said the old man, ‘you can have as many sweets as you like.’

‘For free?’ they gasped in unison.

‘For free,’ uttered the old man simply, profoundly.

It had been the most beautiful day of her life and Jessica didn’t want it to end. On the train home she desperately tried to stay awake, willing the day to last a little longer. But her drowsiness overwhelmed her and she was soon fast asleep.

She awoke to the sound of rain and her mother calling her to get dressed for school. ‘Where did yesterday go?’ she wondered in shock. She couldn’t remember. One minute she was on a sun-lit train, and the next minute *this* – rain and school.

‘I want yesterday,’ Jessica told her mum.

‘Don’t worry about yesterday,’ her mum said. ‘It’s today you ought to be thinking about.’

‘But where did yesterday go? I miss it,’ Jessica cried.

‘There’s yesterday,’ said her mum pointing to a photograph Jessica’s friends had taken.

‘That’s not yesterday. It’s just a photograph. It’s not real.’

Start Question 1 Where did yesterday go?

Questions to take you further

- Where does yesterday go?
- Where is the past?
- Does the past exist?

Jessica’s heart ached for yesterday so she found her way back to the station and caught a train. She was going in search of yesterday.

She returned to the beach where she and her friends had

raced madly. But yesterday wasn't there. The prints from the horses' hooves could still be seen, but were fainter, fading. And whereas the ocean yesterday was blue, today it was grey.

She walked into the village and found the sweet shop.

'You're the girl from yesterday!' chirped the old man happily as she walked in.

'No,' Jessica replied sadly, 'I'm the girl from today.'

'Why the long face?' asked the old man. 'It's the beginning of a whole new year of your life.'

'My mum said that too. She said I should stop thinking about yesterday.'

'She's right. You have such a lot to look forward to.'

'But I don't want to just go forwards. I'd like to go backwards sometimes too.' A deep sigh. 'Where did yesterday go?' Jessica asked hopefully, truly believing the old man might know.

There was a pause. 'I wonder that myself,' the old man replied, his voice deflated.

'Do you know?'

'Some days I think it's gone forever. Some days I'm not so sure.'

Gone forever. Jessica was stung by these words.

She left the old man to catch the train home, but she told

herself that she would keep looking for yesterday.

As the train rocked along the tracks, Jessica's body felt heavy. She could feel sleep coming over her. She closed her eyes and dreamt. She dreamt of ocean sounds and endless shores, the shimmering sun on gilded hair; she dreamt of pounding hooves and the rising moon, and all that was that wasn't there.

Start Question 2 Will Jessica ever find yesterday or is it gone forever?

Questions to take you further

- Is the past inside us?
- Should we forget the past and only think about the present?
- Has the past gone forever?
- **What is the past?**
- **What is memory?**
- When we look at a photograph are we looking at the past?

Your Questions

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Works well with

✓ The Birthday Surprise

✓ The Time Diet

✓ Superbaby Time!

✓ The Telly-Scope

✓ Time-Stretching

✓ The Big Time Experiment

✓ *Thoughtings:* From Me to You

Philosophy: The ontology of the past, the nature of time.

The Butterfly Effect

Peter Worley

Starting age: 10 years Advanced

It's the year 2214 and the Time-Tourist Company offers the holiday of a lifetime. TTC – as the company is known – arranges trips through time using their patented 'Time-Tourist Company Time Machine'. Customers can travel to any time they like as long as it is in the past. It costs a small fortune to do but there is no shortage of willing customers for such a unique and thrilling experience.

In order to avoid any problems that may result from changing the past, TTC are able to place a special path that hovers above the world in the past so that the tourists cannot touch

anything and thereby change the past. They are also invisible to anyone in the past. So all the time-tourists are able to do is view history.

But one day, whilst a group of time-tourists are visiting the Eocene period, between 40 and 50 million years ago, one of the tourists steps from the path despite having been strictly forbidden to do so. When the time-tourist wanders off the path they accidentally step on a butterfly, killing it underfoot.

Start Question Will stepping on the butterfly have any effect on the future? If so, what sort of effect do you think it could have?

Questions to take you further

- It is only a small change, so will it have any effect?
- Can a small change in the past have a large effect on the future?
- When the time-tourists return to their own time, will anything have changed?
- How are things through time connected?
- Is everything connected?
- The Eocene is the geological period in which the earliest butterfly, fossils have been found. If the time-tourist had ended a particular species of butterfly, what effect might that have had?
- Would time travel be difficult for these reasons?

Your Questions

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Works well with

✓ Other entries from the ‘Time’ section (particularly The Non-Existent Hero, The Birthday Surprise, A Poem By You?)

✓ The Broken Window

✓ The Traffic Light Boy (1, 2 and 3)

✓ Jean-etic

Source: A short story by Ray Bradbury called ‘A Sound of Thunder’.

Philosophy: Complexity, causation, chaos theory, contingency.

Metaphysics: Freedom

The Queen of Limbs

Peter Worley

Starting age: 9 years Advanced

[**Question to consider whilst reading or hearing the story** What is Marion?]

Marion awoke and climbed out of her box. She was a performer and really enjoyed the feeling of being on stage and giving people joy. She was a comedian and laughter her currency.

Marion worked with a hand puppet called Pippa. She felt sorry for Pippa because Pippa was not her own person. She only came alive when someone put their hand inside her empty body and moved her. Pippa was not very happy because she was made to do a performance she didn't want to do. She explained to Marion that she was a 'real actor' and that she should be doing Shakespeare, but each night she was made to do silly vaudevillian comedy. 'It's beneath me!' she protested.

Although Marion was very happy doing comedy, she still felt sorry for Pippa for not being able to make her own decisions and for not being able to do what she really wanted to do. She told Pippa this. Pippa looked at Marion with an angry glare in her eyes (Pippa's puppet-face *always* had an angry glare, but right now it was the correct face to have!).

'Do you think that you are any different?' she said to Marion.

Marion was in a very different situation to Pippa – there was no hand controlling her decisions, but she thought it insensitive to say so.

Pippa continued. 'Are you able to choose what you do?'

Marion felt that she should respond. 'Of course I can, I love my job and I would still choose my job even if I could do anything else.'

'But *could you* really choose to do anything else?' asked Pippa.

'Yes!' replied Marion, 'it's just that *I don't choose* to do anything else because I love what I do.' She paused before continuing. '*I don't have a hand in me controlling my every move!*' She regretted saying these words the moment she had said them.

Though Pippa's face was unable to change it seemed that the anger in her glare had increased. 'You may not have a hand controlling you but you should take a closer look around you!' Clearly upset, Pippa left Marion in a state of bewilderment. What could Pippa have meant?

Start Question 1 Does Marion make her own decisions and choices?

Questions to take you further

- What is Marion?
- If she didn't happen to love what she did, would Marion be able to choose to do something else?
- Who do you agree with in the argument between Pippa and Marion?
- Does the fact that Marion believes that she could choose to do something else prove that she has a choice?
- **What is a choice?**
- What do you think Pippa could have meant when she said 'you should take a closer look around you'?

[**Question to consider whilst hearing the second part of the story** What do you think it is that Marion is beginning to notice?]

That night, during her performance – a performance she had run hundreds of times, perhaps thousands – she remembered Pippa's words that she should take a closer look around her. There was a glint of light from time to time that she caught out of the corner of her eye. Now that she thought about it, the glint had always been there but she hadn't really thought about it before. *What was that glint?*

There it was again! It was the same glint that spider's webs sometimes give at certain angles in the light. *And again!* It looked like a single line of thread very close to her head. Then there were more of them. Threads all around her.

Where did they lead? They came from above and ended … at her hands and arms and legs! Fine, almost invisible threads that told only one story: Marion realised with horror that she was not so different from Pippa after all.

The cause of Pippa's movements was easy to see – a clearly visible hand and arm – but the cause of Marion's movements was less easy to see. Now that she had seen them, however, she couldn't believe that she hadn't seen them before. Now that she had seen the threads that guided her arms and legs they seemed like coarse ropes hanging all around her, getting in the way.

Start Question 2 What is Marion and what has she discovered about herself?

Questions to take you further

- How much are we like Marion and Pippa?
- Are there any things that cause us to move, like Pippa's hand and Marion's threads?
- Are there any things that cause us to make the decisions we do, other than ourselves?
- Are we like Pippa and Marion – are there forces that control us – or are we different?
- Are we free to choose what we do? Are we free to make our own decisions?

Works well with

✓ Other entries in the ‘Freedom’ section

✓ Nick of Time

✓ The Wicked Which

✓ Charlie’s Choice

✓ A New World

✓ *Thoughtings:* Are You Free?

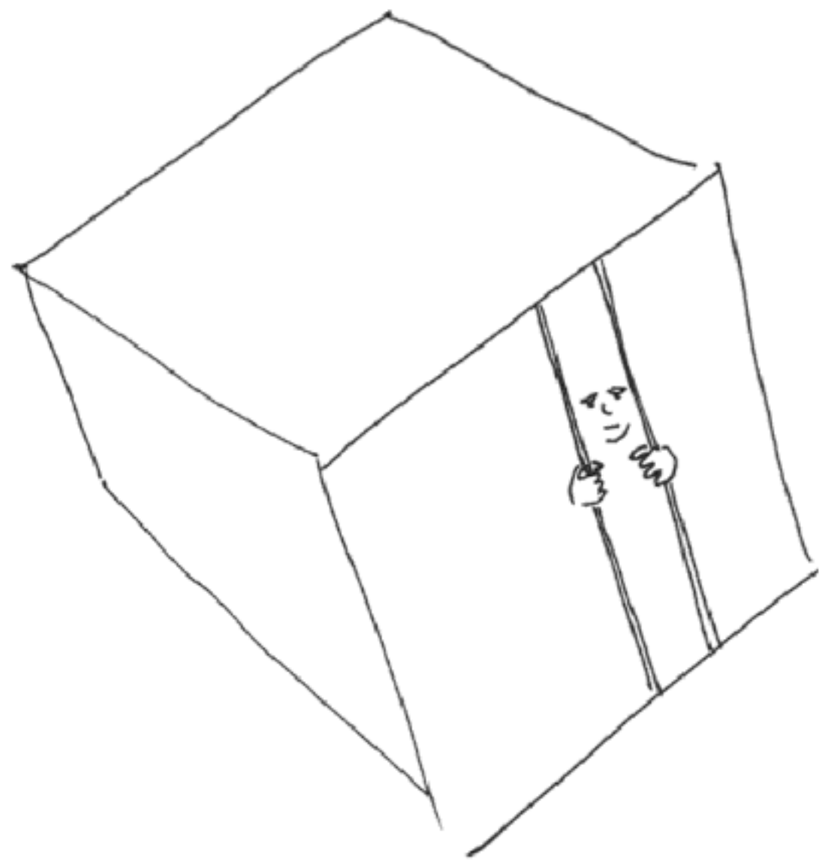
✓ *The If Machine:* The Happy Prisoner, The Frog and the Scorpion, The Little Old Shop of Curiosities, Billy Bash, The Robbery

Source and Philosophy: Determinism and free will, Schopenhauer’s *Prize Essay on the Freedom of the Will*.

Prisoner

Georgina Donati

Starting age: 7 years



Start Question Is this person free?

Questions to take you further

- What is it that makes them free or not free?
- What does it mean to be free?
- **What is freedom?**
- Can you be more or less free?
- Is someone in a prison free at all?
- Are people who are not in prisons free?
- If the person chose to be locked in the prison, would they be free then?
- Are there different kinds of freedom? If so, then what would they be?
- You may think the person is not real. If they aren’t, then are they free?

Your Questions

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Works well with

✓ Other entries in the ‘Freedom’ section

✓ Nick of Time

✓ The Wicked Which

✓ Charlie’s Choice

✓ A New World

✓ *Thoughtings:* Are You Free?

✓ *The If Machine:* The Happy Prisoner, The Frog and the Scorpion

Philosophy: Freedom of speech, political freedom, freedom and determinism, freedom of goodness and reason.

Are There Cogs Beneath the Wind?

David Birch

Starting age: 7 years

In this story there are two worlds. One of these worlds is the Clockwork world. Every morning, before sleeping people wake, the world is wound up like a clock. Tightly, tightly it is turned and then released, making the day proceed cog-like. Everything happens predictably, nothing is accidental, the whole day unwinds in an orderly tick-tock way.

There is another world very different to this. This is the Windswept world. Every morning, before sleeping people wake, rather than being wound up the world is shaken up, as if it were a giant snow globe. The day then proceeds swirling. Everything happens randomly, little is predictable, the whole day unfurls in a disorderly swish-swosh way.

Whereas the Clockwork world is full of sense, the Windswept world if full of surprise. And although the Clockwork world is tidy, the Windswept world is a mess. In the Clockwork world laws determine what will happen, but in the Windswept world it is all a matter of luck. The Clockwork world is full of knowledge; the Windswept world has only guesses. In the Windswept world people walk around with their fingers permanently crossed, but in the Clockwork world they believe

a thorough plan is all one needs.

The Clockwork world is folded and neat. The Windswept world is tangled in heaps.

Start Question: Which of these worlds is our world most like?

Questions to take you further

- Is it one or the other or is it both?
- Which world would you rather live in?
- Which of these worlds is most:

  a. Happy?

  b. Dangerous?

  c. Perfect?

  d. Add to list as suggestions are made.

- In which world does this belong?

  a. Choice.

  b. Natural disasters, like earthquakes and tornadoes.

  c. Birthdays.

  d. Thoughts and wishes.

  e. Time.

f. Adventure.

g. Right and wrong.

h. Again, add to list as suggestions are made.

Your Questions

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Works well with

✓ Other entries in the ‘Freedom’ section

✓ A Random Appetizer

✓ What Goes Up …

✓ The Broken Window

✓ Jack’s Parrot and Wind-Spell

Philosophy: The teleological argument for the existence of God, determinism and chance.

The Clockwork Toymaker

Peter Worley

Starting age: 11 years Advanced

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