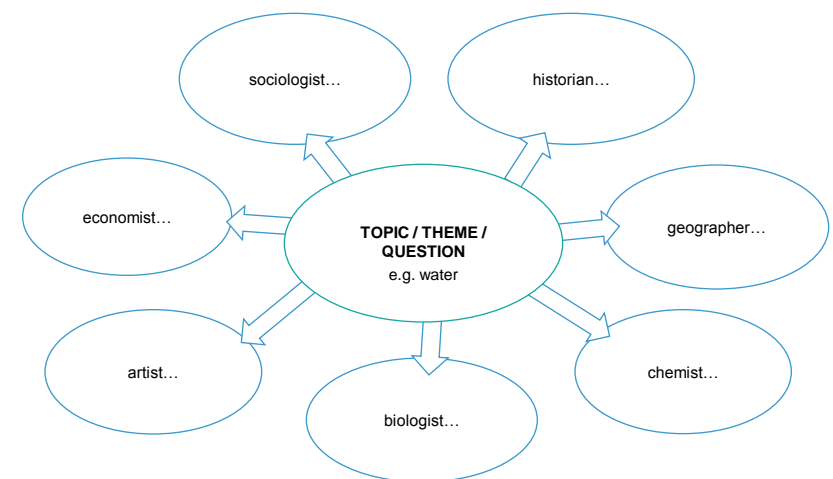


Futurelab Thinking Guides

Think and work through issues, topics or questions, to help shape, define and focus ideas.



This pack provides a series of ready-made interactive 'thinking guides' or 'frameworks' which can support students' projects and research. Thinking guides support the thinking or working through of an issue, topic or question and help to shape, define and focus an idea and also support the planning required to investigate it further. These thinking guides can be used as a basis for whole class discussion, or emailed to individuals or groups to complete. They can also be used as a presentation tool to share your findings and thinking with others.

With this pack you can:

- use our ready-made thinking guides
- make a new thinking guide from scratch
- use it to set class projects
- print them out for each student
- change and customise thinking guides, you can add or change text, shapes, images etc.
- as a teacher, you can set up the sequence that you want the thinking guide to be revealed in, so that you can stage the thinking activity
- you can present your project
- you can send your thinking guide to a whole group of people
- work in groups on the same thinking guide.

These thinking guides have been created due to popular demand as an editable and printable resource that can be used easily in the classroom (as well as other spaces where guides are needed to help structuring thinking and planning). They build on Futurelab's work with young people and teachers to scaffold enquiry and project work.

The guides build on Futurelab's Enquiring Minds programme. Enquiring Minds was a three-year research and development programme, run by Futurelab and funded by Microsoft. The project developed a distinctive approach to teaching and learning that takes seriously the knowledge, ideas, interests and skills that students bring into schools and enables young people to take more responsibility for the content, processes, and outcomes of their learning. For more details about the work and for free guides and handbooks visit www.enquiringminds.org.uk.

Map your ideas

Review plans

This activity can be used to analyse or appraise anything in a structured way.

Student name:

Topic:

Strengths

Weaknesses

Enablers

Barriers

Opportunities

Threats

Anticipate issues

Use it to work backwards (from the right box to the left box) from an imagined perfect future to a feasible and possible present.

Student name:

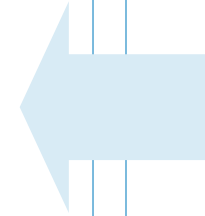
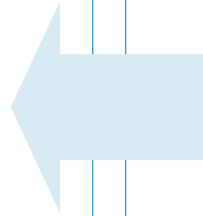
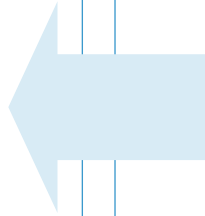
Topic:

4) Now step back to what might be possible now

3) Now step back to how this could be realistically achieved

2) Now describe that perfect future with fictional examples

1) Envision a perfect future



Invite feedback

A tool for creating lots of ideas in response to a broad issue or problem and then turning those ideas into actions.

Student name:

Topic:

	7.1	
7.4	Idea 7	7.2
	7.3	

	1.1	
1.4	Idea 1	1.2
	1.3	

	5.1	
5.4	Idea 5	5.2
	5.3	

	6.1	
6.4	Idea 6	6.2
	6.3	

Idea 7	Idea 1	Idea 5
Idea 6	Describe the problem	Idea 3
Idea 8	Idea 2	Idea 4

	3.1	
3.4	Idea 3	3.2
	3.3	

	8.1	
8.4	Idea 8	8.2
	8.3	

	2.1	
2.4	Idea 2	2.2
	2.3	

	4.1	
4.4	Idea 4	4.2
	4.3	

Possible/probable/preferable futures

Think about the way in which a particular theme or issue may develop in the future.

Student name:

Topic:

TOPIC



Future developments



Future developments



Future developments

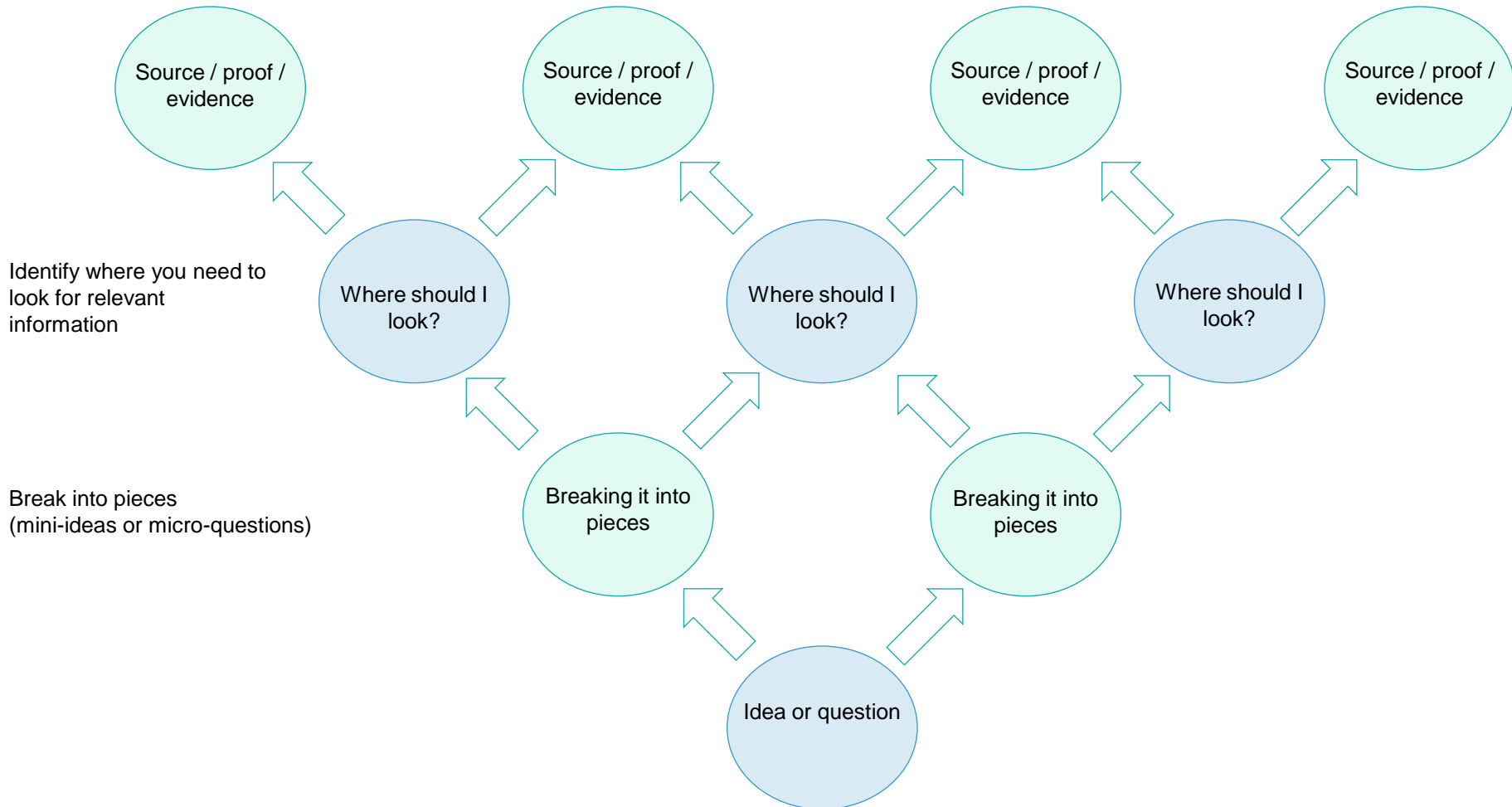
Solve problems

Knowing trees

Helps you think about a question or problem and to identify sources or evidence to support your ideas.

Student name:

Topic:



Is / is not

Scope out the boundaries of a problem or analyse a situation by clearly stating what it is and what it is not.

Student name:

Topic:

THE SITUATION

Is...

Is not...

Reversal

Assess a problem from a different perspective or stimulate new thinking when you are stuck in a rut.

Student name:

Topic:

THE PROBLEM

(Add the issue here... e.g. the room is dark)

OBVIOUS WAY OF LOOKING AT IT

(Add the obvious way of looking at it e.g. add more light)

THE REVERSAL

Choose a new way to approach the issue: opposite viewpoint, inside vs. outside, male vs. female etc. (e.g. remove the dark)

Idea 1

Idea 2

Idea 3

Using the essence

Create new ideas by getting to the heart of the issue and then looking elsewhere whilst retaining the essential qualities.

Student name:

Topic:

What's the essence of the issue? (in one word)

What is the heart of this situation? What is it all about? What are its essential qualities? What is its core of being?

(e.g. You're looking for an idea to make the queues at theme parks less boring. You might identify the essence of the issue as 'waiting'.)

What else has this as its essence?

Domain #1

(e.g. a doctor's waiting room, or airport lounge)

Characteristic 1

Characteristic 2

What else has this as its essence?

Domain #2

Characteristic 1

Characteristic 2

Apply ideas/characteristics to the original issue

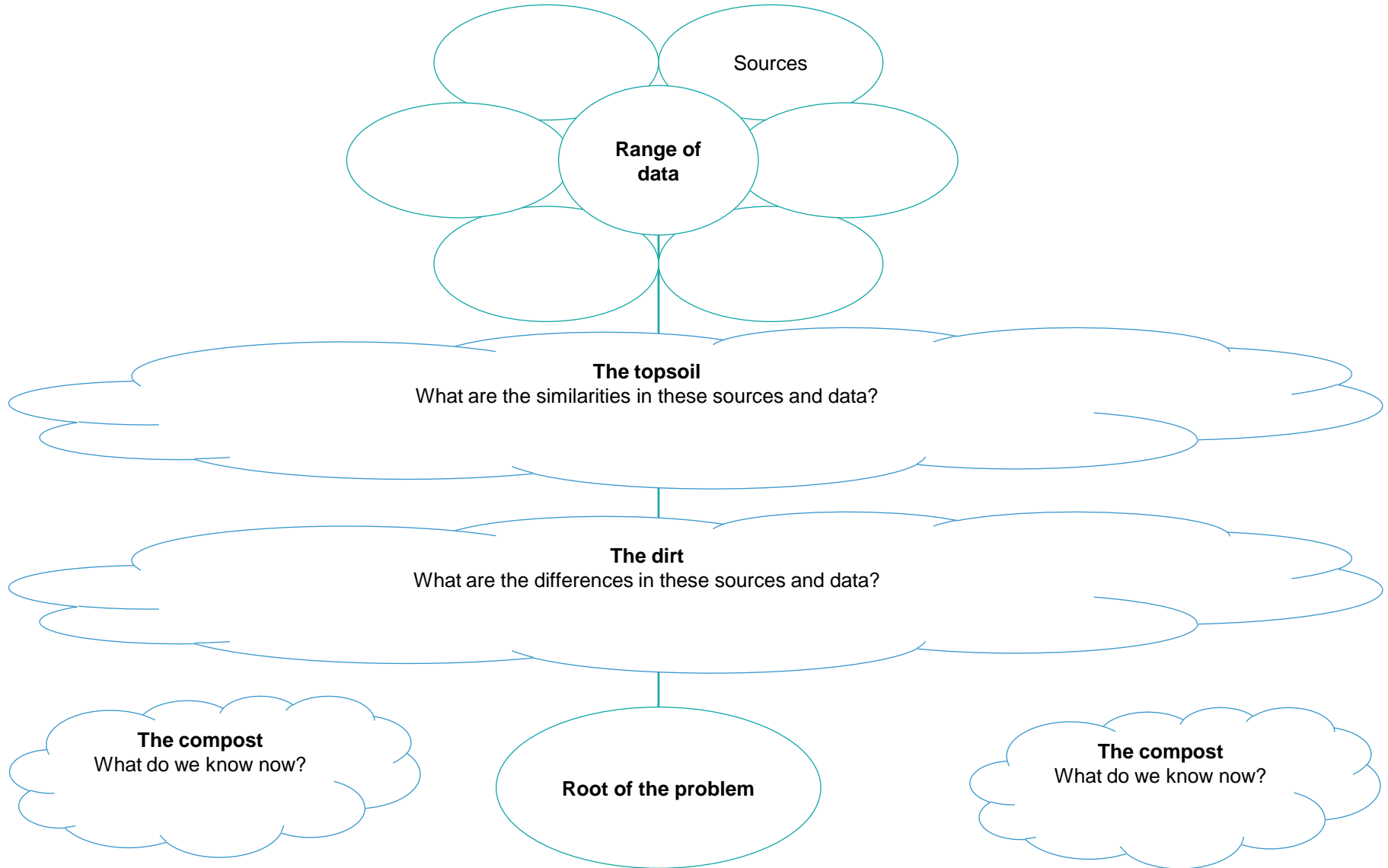
(e.g. things to read, TV, arcade machines, etc?)

Digging up roots

This guide is about exploring a problem by starting with lots of information and gradually digging down to get to the 'root' of the problem.

Student name:

Topic:



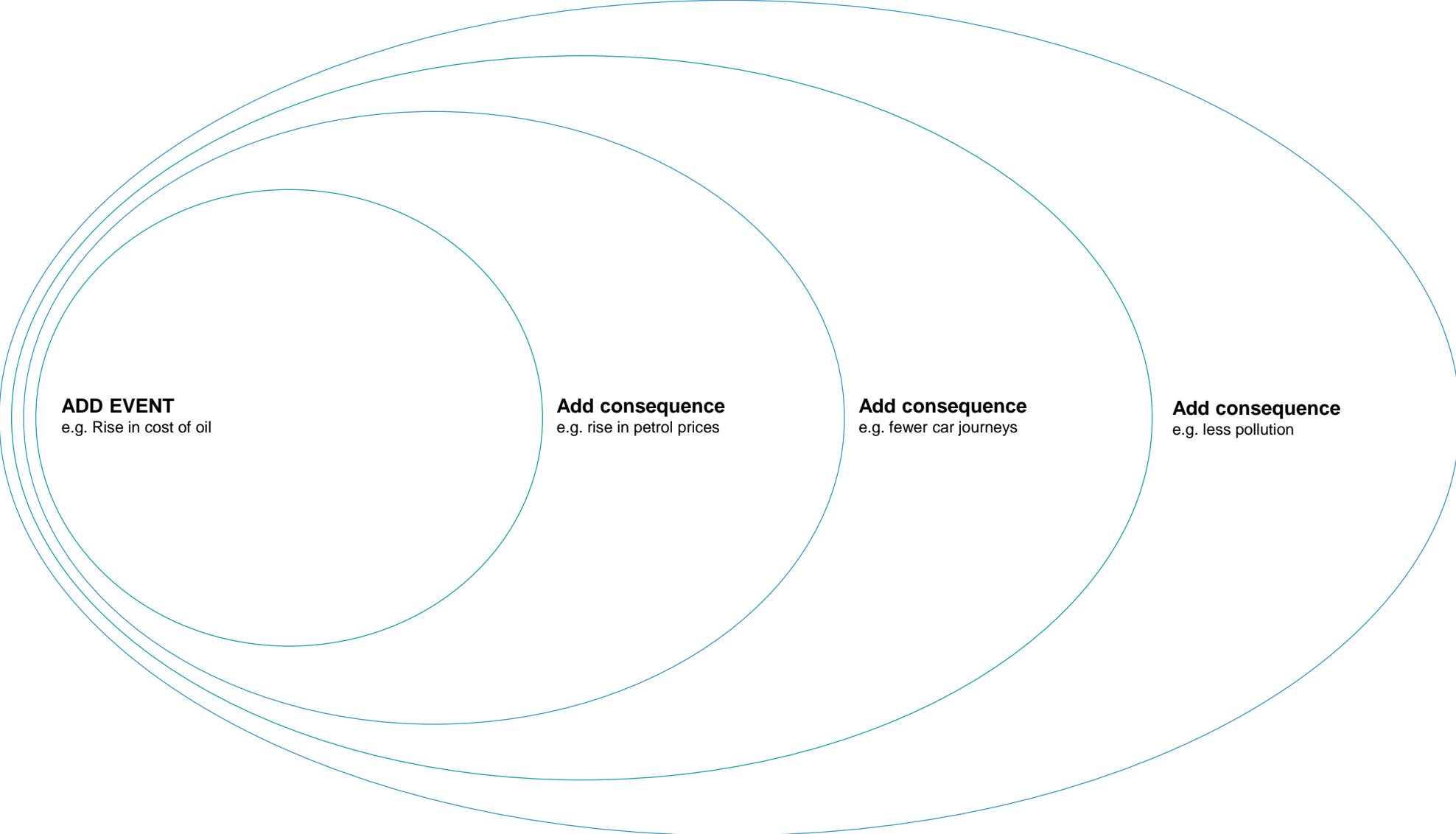
Explore

Futures Wheel

Think through the consequences and impacts of an event.
What are the knock on effects?

Student name:

Topic:

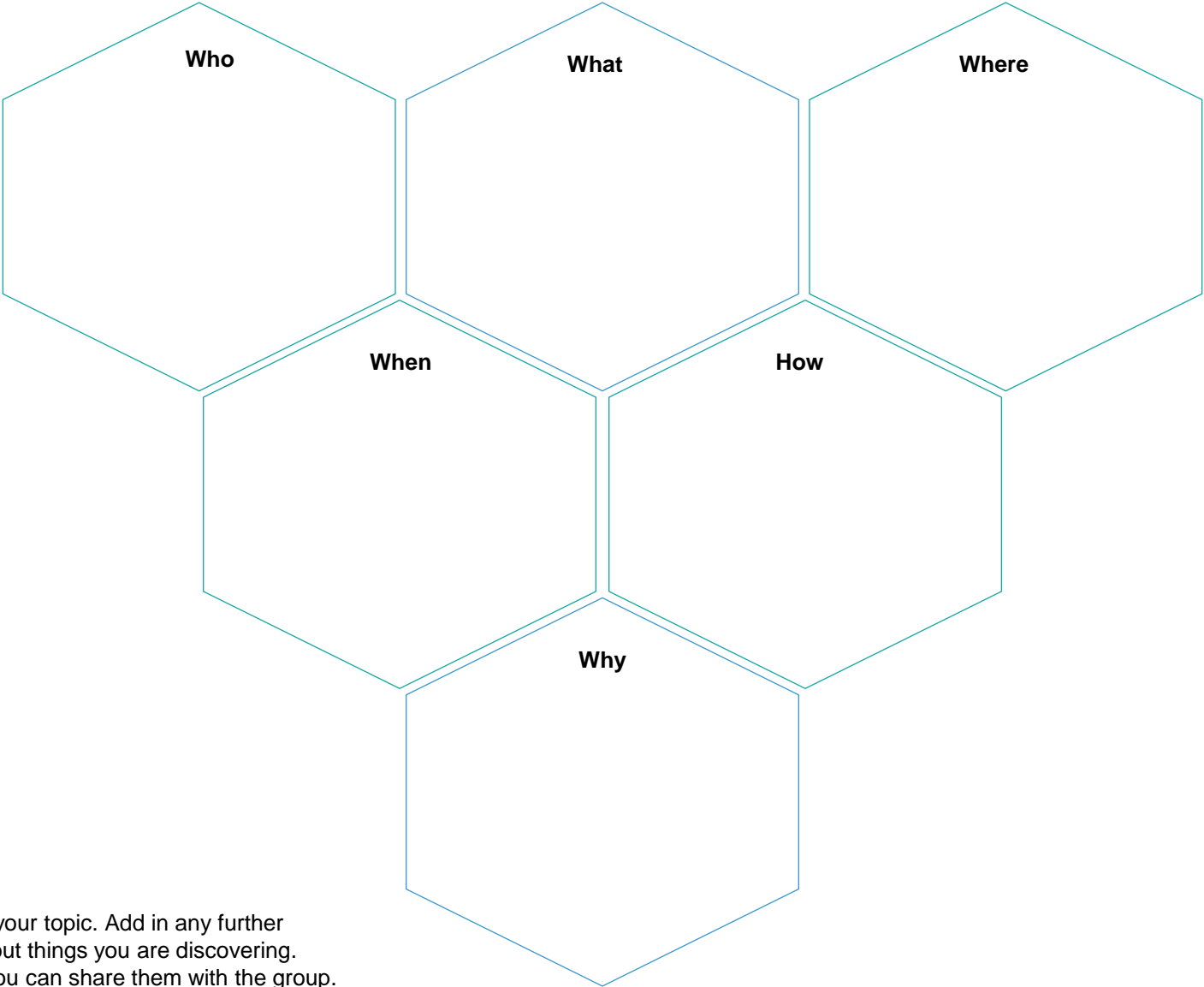


Question things

Question everything you read, hear and see.

Student name:

Topic:



Questioner:

Your job is to question your topic. Add in any further questions you have about things you are discovering. Sort your answers so you can share them with the group.

Compare and contrast

Make comparisons between two topics. Establish what is unique and what is similar about each one.

Student name:

Topic:

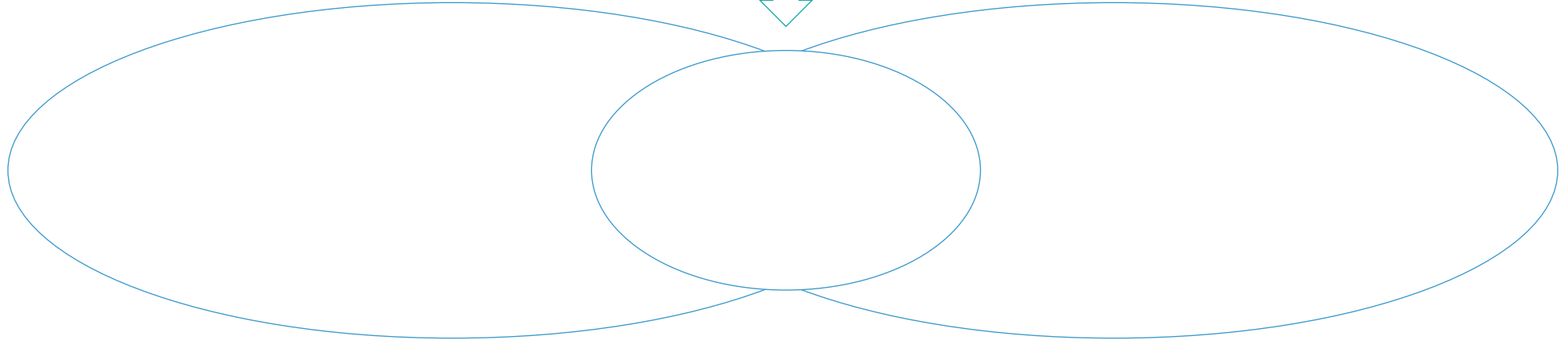
TOPIC: Add topic name here

TOPIC: Add topic name here

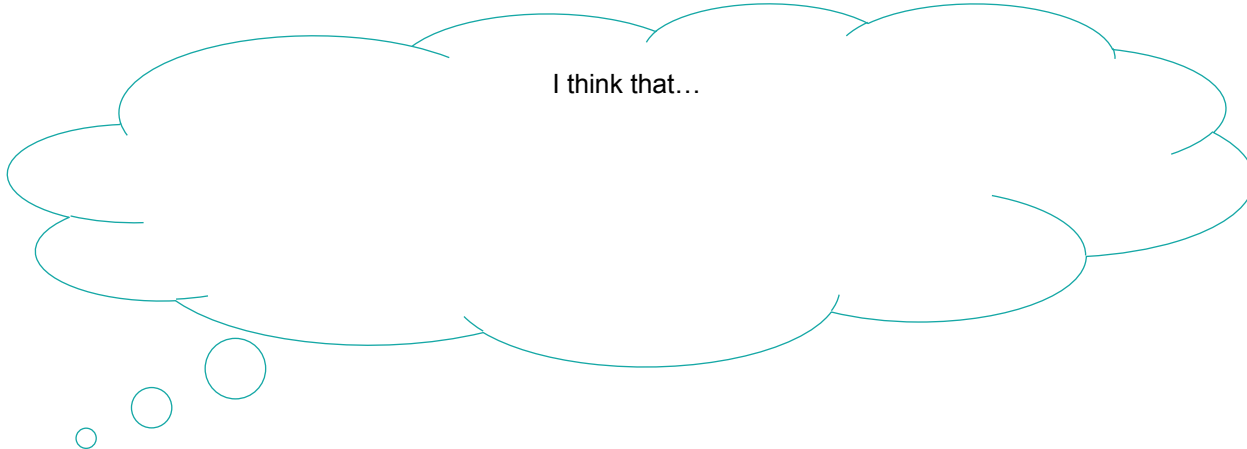
What is different about this?

What is similar about them?

What is different about this?



I think that...



A day in the life

Seeing things as they are experienced.

Student name:

Topic:

Use this to create 'user profiles'. Storyboard a typical day - to think through the experiences of someone or something.

A useful tool to get a picture of your audience or customers if you are developing a new product or service.

Who's life...?

[upload picture - optional]

Research notes

7am-9am

9am – 12 noon

12 noon – 3pm

3pm-6pm

6pm-9pm

9pm – 1am

Analyse

Tracking an enquiry

Plan your enquiry. Establish the big questions. Identify your likely sources. Document the facts.

Student name:

Topic:

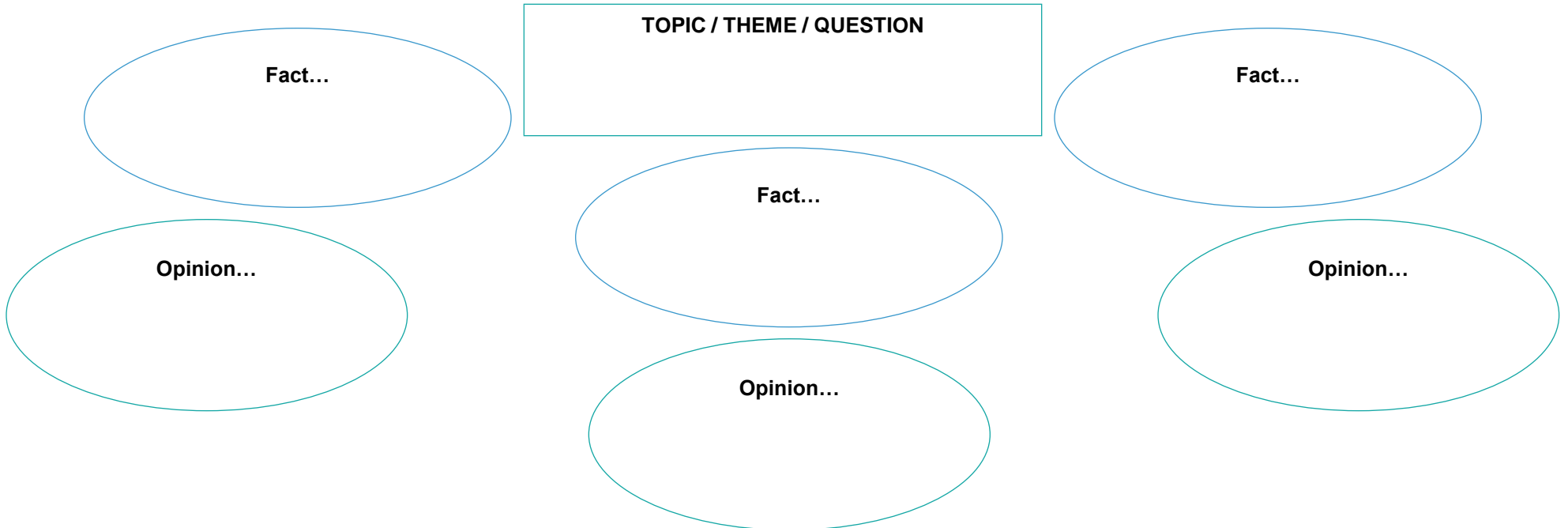
FOCUS OF ENQUIRY					
BIG QUESTIONS					
Q1		Q2		Q3	
Sources of evidence		Sources of evidence		Sources of evidence	
Facts / evidence		Facts / evidence		Facts / evidence	

Facts or opinions

Sort out the facts from the opinions about a particular topic.
Document what you agree/disagree with.

Student name:

Topic:



Opinions I agree with....

Opinions I disagree with....

Other opinions I have...

To explore further...

Making Meanings

This thinking guide is useful for establishing what you want to know, then making sense of what you find out.

Student name:

Topic:

What I want to know	What I found out	Why is it important?

I wonder if...

SCAMPER

Analyse something according to the SCAMPER principle - what could be substituted, combined, adapted, modified, put to other uses, eliminated or rearranged?

Student name:

Topic:

THE PROBLEM, ISSUE, THEME, NEED

e.g. Want to design an environmentally friendly carrier bag...

S

what can be **substituted**?

C

what could be **combined** with something else – a blend, assortment etc.

A

what can be **adapted**?

M

what can be **modified**?
- change meaning, colour, smell,
form, shape

P

what can be **put** to other uses?
- new ways to use as is

E

what can be **eliminated**?
- waste

R

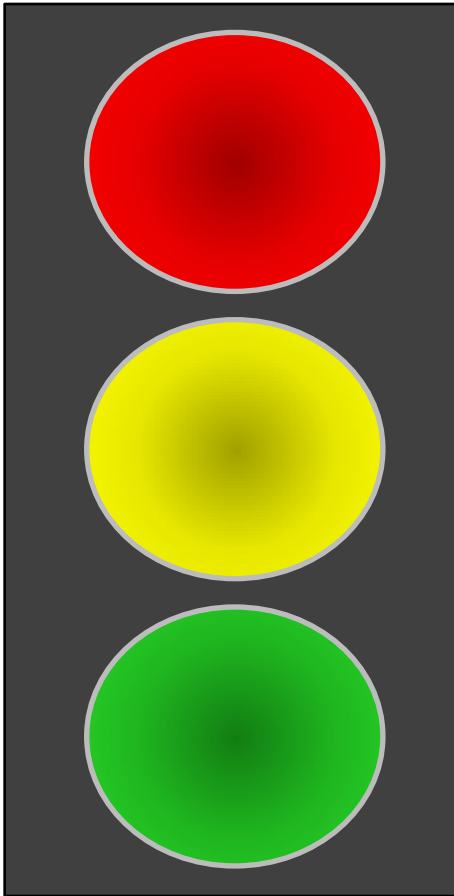
what can be **re-arranged**?

Traffic lights

A thinking guide to analyse a particular situation - what changes would you make?

Student name:

Topic:



If you could make anything **stop**, what would it be?

Why?

If you could make anything **ready**, what would it be?

Why?

If you could make anything **go**, what would it be?

Why?

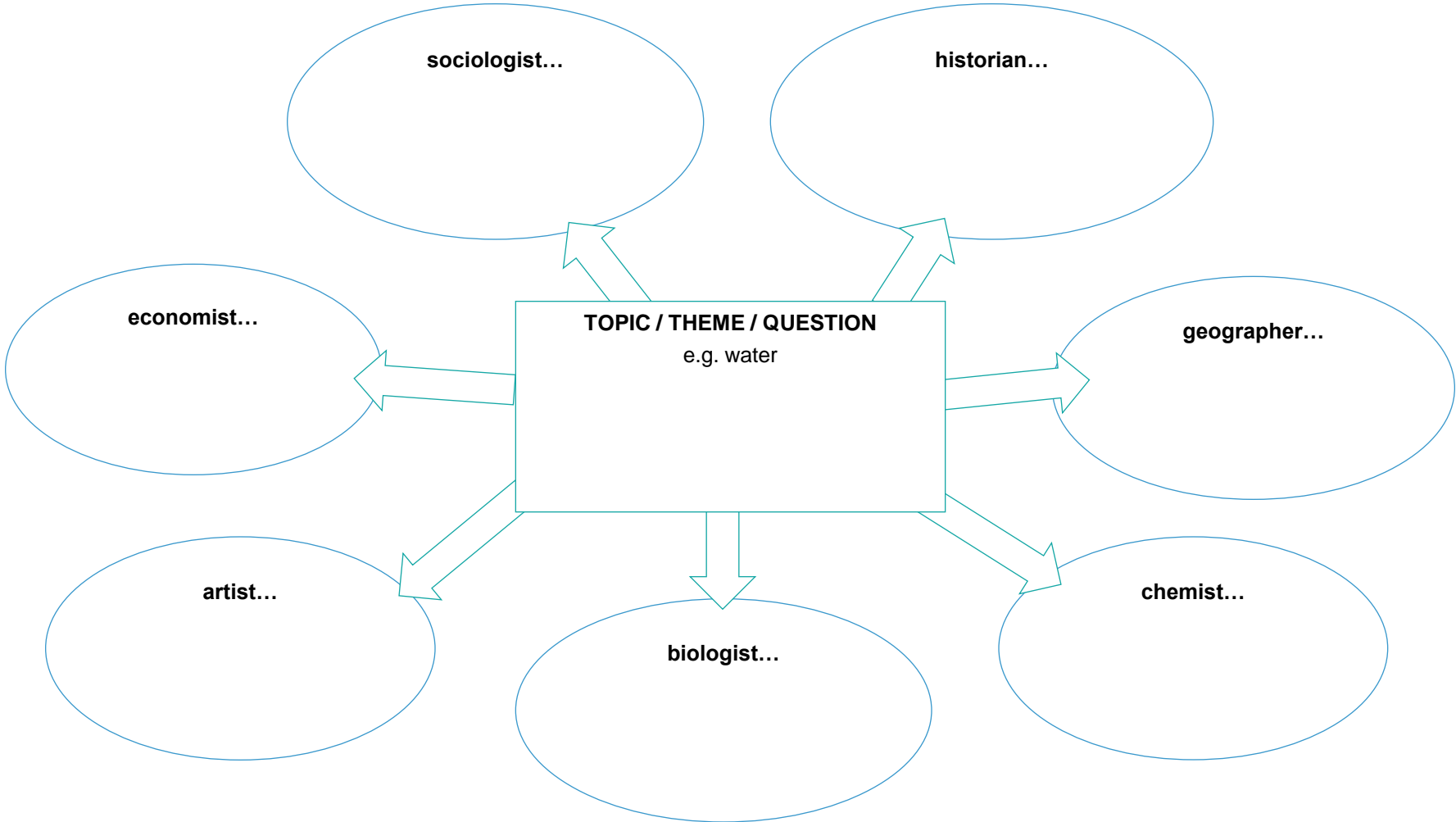
Different Perspectives

From a different angle...

Examine a topic through a variety of different subject lenses. Understand how knowledge changes dependent on the perspective from which it is viewed.

Student name:

Topic:

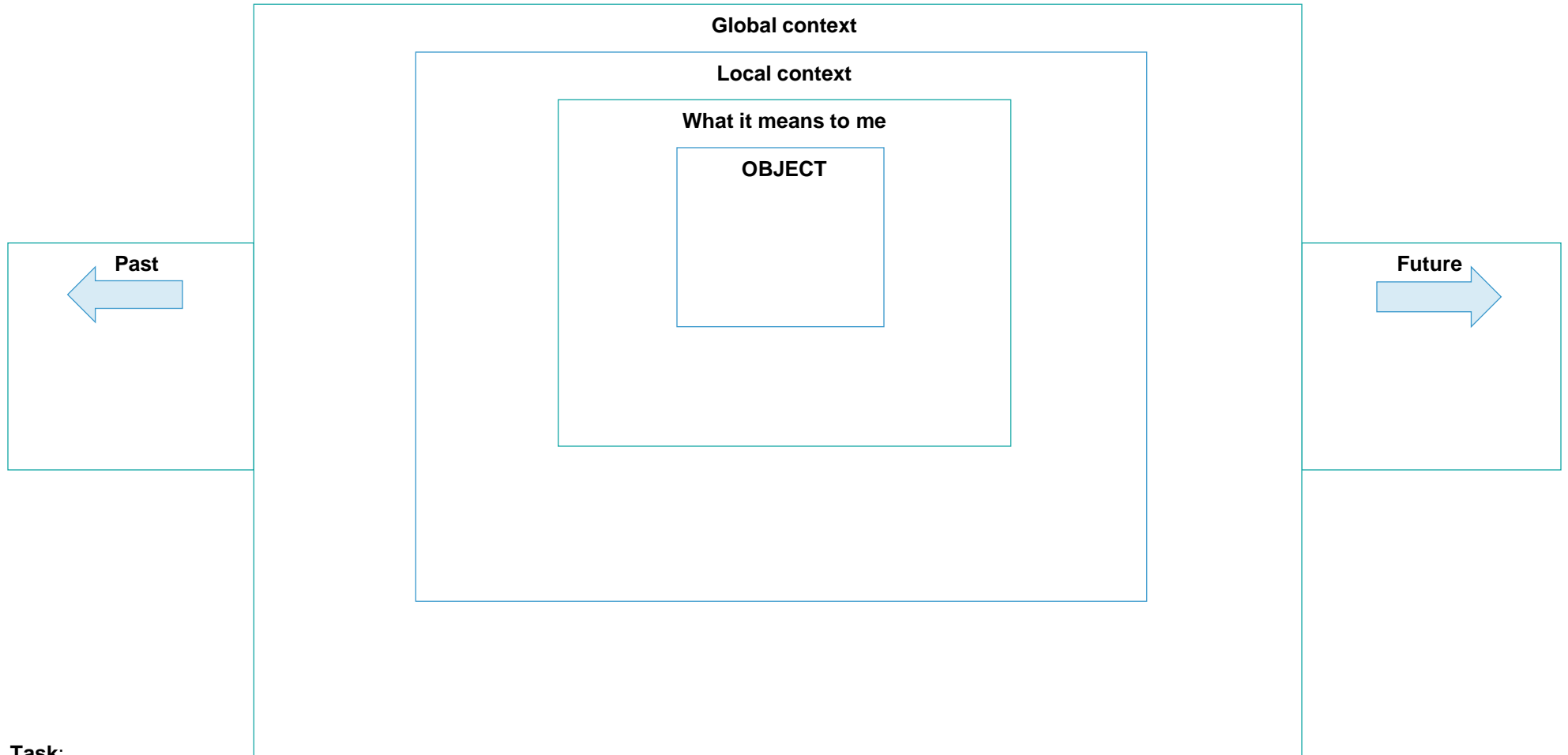


Thinking boxes

Analyse an object or topic from different perspectives: local, global and its place in history.

Student name:

Topic:



Task:

- 1) Describe the object
- 2) What it means to you
- 3) How it affects things locally
- 4) How it affects things globally
- 5) How it has changed in the past and future

Plus, minus, interesting

Evaluate an issue or idea by identifying its plusses, minuses and any interesting points.

Student name:

Topic:

THE ISSUE

Plus points

Minus points

Interesting points


Examine existing and new ideas

Investigate supporting evidence and conflicting views; then make your own new ideas.


Student name:

Topic:


Inquiry question / statement	My hypothesis



What I want to know	What I found out	Why is it important?



New ideas:

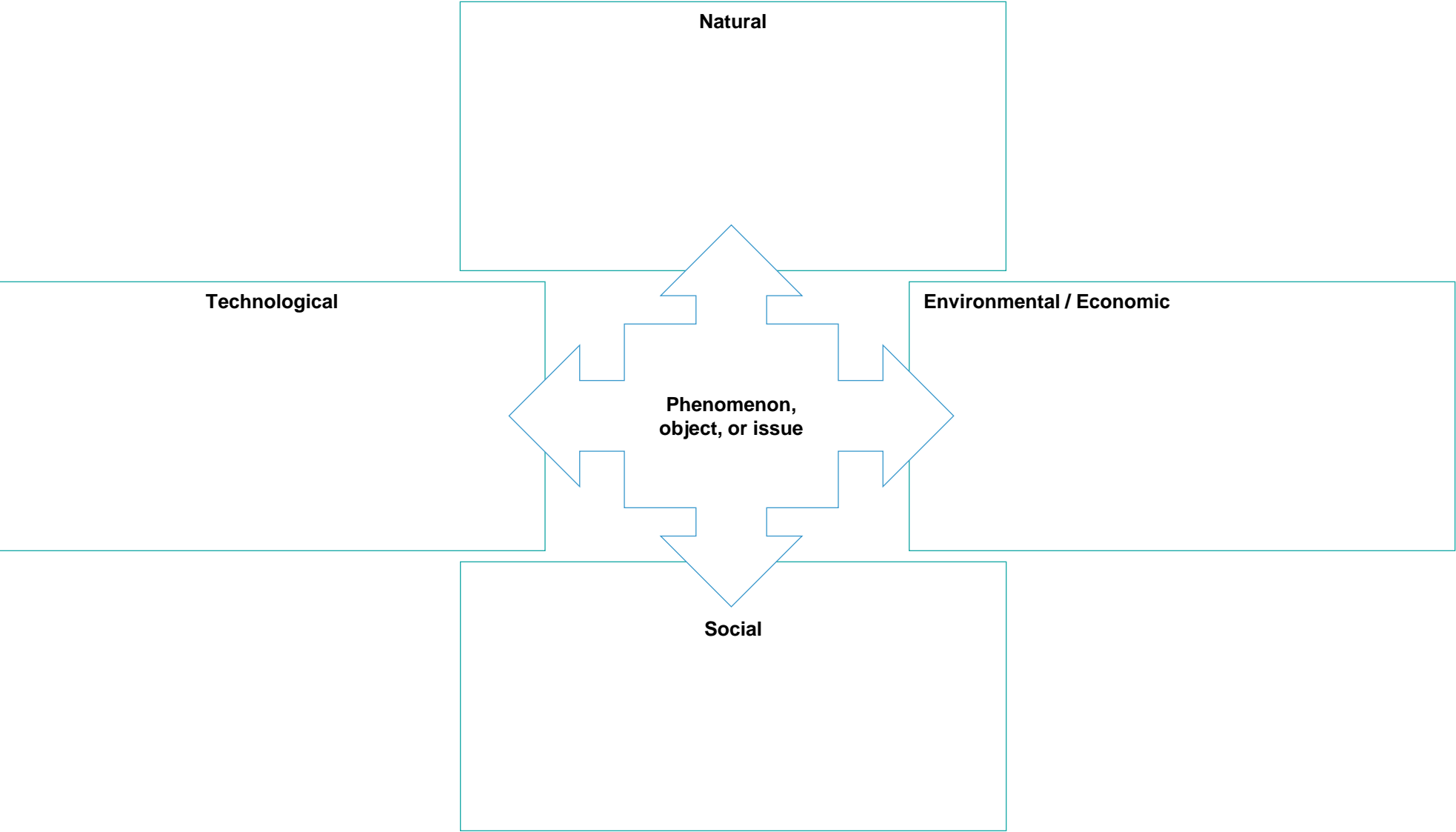


Compass Rose

Examine a phenomenon, object or issue from a variety of perspectives.

Student name:

Topic:



Terms and Conditions & Privacy Policy

Terms and Conditions

We hope you enjoy using the Futurelab Thinking Guides.

These guides are provided by:

Futurelab
1 Canons Road
Harbourside
Bristol
BS1 5UH, UK
tel: +44 (0)117 915 8200
fax: +44 (0)117 915 8201
e-mail: info@futurelab.org.uk
www.futurelab.org.uk

Access to and use of these guides is provided by Futurelab Education (Futurelab) subject to the following terms:

Using the Futurelab Thinking Guides means you are bound by these terms of use. If you do not agree to these terms of use, please do not use the contents of the thinking guide files. You are only authorized to use these guides if you abide by all of these terms of use and all applicable laws.

Futurelab may change these terms at any time by posting changes online. Please check back regularly for updates.

These Thinking Guides can only be used under these conditions:

They are only to be used within your organisation and not shared with external parties.

They must not be resold or transferred.

The Futurelab logo & other branding elements must not to be removed.

They must not be used as part of a paid service without Futurelab's consent (e.g. consultancy).

Disclaimers and Limitation of Liability

The content of these guides, including the information, names, images, pictures, sound files, logos, icons, links to third party sites is provided "AS IS" and on an "IS AVAILABLE" basis without any representations or any kind of warranty made (whether express or implied by law) to the extent permitted by law, including the implied warranties of satisfactory quality, fitness for a particular purpose, non-infringement, compatibility, security and accuracy.

Under no circumstances will Futurelab Education be liable for any of the following losses or damage (whether such losses were foreseen, foreseeable, known or otherwise): (a) loss of data; (b) loss of revenue or anticipated profits; (c) loss of business; (d) loss of opportunity; (e) loss of goodwill or injury to reputation; (f) losses suffered by third parties; or (g) any indirect, consequential, special or exemplary damages arising from the use of Exploratree.org.uk regardless of the form of action.

Privacy Policy

Futurelab is committed to maintaining your personal information in a manner which meets the requirements of the UK's Data Protection Act (1998), and will take all reasonable steps to ensure that your personal data is kept secure against unauthorised access, loss, disclosure or destruction. In order to respect your privacy, we manage personal data in accordance with the Data Protection Act's eight 'Data Protection Principles', namely:

Personal data shall be processed fairly and lawfully.

Personal data shall be obtained only for one or more specified and lawful purposes, and shall not be further processed in any manner incompatible with that purpose or those purposes.

Personal data shall be adequate, relevant and not excessive in relation to the purpose or purposes for which they are processed.

Personal data shall be accurate and, where necessary, kept up to date.

Personal data processed for any purpose or purposes shall not be kept for longer than is necessary for that purpose or those purposes.

Personal data shall be processed in accordance with the rights of data subjects under this Act.

Appropriate technical and organisational measures shall be taken against unauthorised or unlawful processing of personal data and against accidental loss or destruction of, or damage to, personal data.

Personal data shall not be transferred to a country or territory outside the European Economic Area unless that country or territory ensures an adequate level of protection for the rights and freedoms of data subjects in relation to the processing of personal data.

The data will not be disclosed to external organisations other than those acting as agents for Futurelab in accordance with our normal activities.

Futurelab

1 Canons Road

Harbourside

Bristol

BS1 5UH

tel: +44 (0)117 915 8204

fax: +44 (0)117 915 8201

e-mail: info@futurelab.org.uk

blog: flux.futurelab.org.uk

twitter: @futurelabedu

www.futurelab.org.uk