THE ST. MARY'S PARTNERSHIP

Assessment & Feedback

Feed-forward diagnostic

What are we trying to improve?

We now deliver an ambitious, broad curriculum that provides depth and sequencing of key knowledge and skills to enable children to securely move between phases of their education. Our children are now building schematic links, within subject disciplines, to connect ideas, events, people and information.

However, we also know that there are some issues impacting pupils' prior knowledge that we need to overcome:

- Some schools are at an earlier stage of introducing the curriculum. Therefore, our intended pathways will not be complete, because gaps exist in knowledge from previous years.
- Some teachers are sticking rigidly to the MIRO and the sequence of learning – without considering gaps that exist before, or assessment of understanding as they deliver it.
- Some teachers are not identifying the difference between what has not been taught (gaps), and what has – but has been misunderstood by pupils (misconceptions).

The process of checking pupils' prior knowledge

Assessing pupils' prior knowledge and understanding

- Prior knowledge mini quiz to check component knowledge of a unit of study
- Low stakes quizzing to ascertain knowledge base of the child - testing prior knowledge components

Children mark their own quizzes and share their results.

- Prior-knowledge quiz is stuck inside exercise book as a reference
- Results /8 are shared with teacher live in the lesson

Feed-Forward diagnostic completed

- Teacher to use high-impact/low-effort diagnostic tool to help consider implications for teaching.
- Misconceptions and knowledge deficits to be picked up with a clear plan for next steps

What do I already know? Pre-assessment Knowledge Quiz
Year 5 Science Spring 1
Properties & Changing Materials

Question 1: What does "brittle" mean?
a) The ability to resume normal shape after being stretched
b) Hard but can easily break
c) Relates to heat

Question 2: True or False. An insulator is a material that readily allows the passage of heat or sound.
- True
- False

Question 3: A material that becomes incorporated into a liquid to form a solution is said to _____.

Question 4: Matching Definitions

Conductor	Liquids which do not mix
Evaporate	A material which readily allows the passage of heat or sound
Immiscible	Turn from liquid into vapour or gas

Question 5: What is a solute?
a) A solid, liquid, or gas
b) The minor component in a solution
c) A dent made in an object's edge or surface

Question 6: What is the difference between a reversible and an irreversible change?

Question 7: Which of the following is an example of an insoluble substance?
a) Sugar in water
b) Salt in water
c) Sand in water

Question 8: The ability of an object or material to resume its normal shape after being stretched or compressed is called _____.

The purpose of checking prior assessment:

1. To understand the knowledge-base (over time) of children before they are taught a unit of work.

2. To ensure that misconceptions can be addressed ahead of delivery – which supports pupils to build new knowledge on firm foundations.

3. To enable you to consider what is the MOST important content to teach/impart in the unit and which sections may need a lighter-touch.

THE ST. MARY'S PARTNERSHIP

Assessment & Feedback: Feed Forward Diagnostic

Subject:		Assessment:	Pre		Post		Exit		Group/Set:		Year:	
Assessment score average for the class:	/	Context:	PP		SEN		EAL		Unit of work:			

Misconceptions:	Missing prior knowledge: (Vocabulary/Disciplinary/Substantive)	Barriers to learning:

A misconception is a misunderstanding or false-belief that leads to children demonstrating a barrier to learning. Misconceptions occur through misinterpreting an idea, faulty reasoning or exposure to inaccurate information. Sometimes we don't check for accuracy of pupils' ideas before allowing children to apply newly acquired knowledge and skills. *E.g. in Science, thinking that only shiny surfaces or water emit light.* **We have to address misconceptions to improve how children build knowledge coherently and securely.**

When pupils have missing prior knowledge, they have weaker foundations to build upon newly acquired knowledge. **This can lead to misconceptions, or they can develop gaps in knowledge over time.** Other issues impacting prior knowledge include teachers delivering content too quickly – without depth - or moving on before it is embedded. *E.g. pupils who are not taught securely about the reformation under Henry VIII, will struggle to make connections to the rule of Mary I and subsequent rule of Elizabeth I and her reversal of Catholicism.*

How will these misconceptions be addressed?	What previous unit	to learning:

Feed-forward prior knowledge quiz

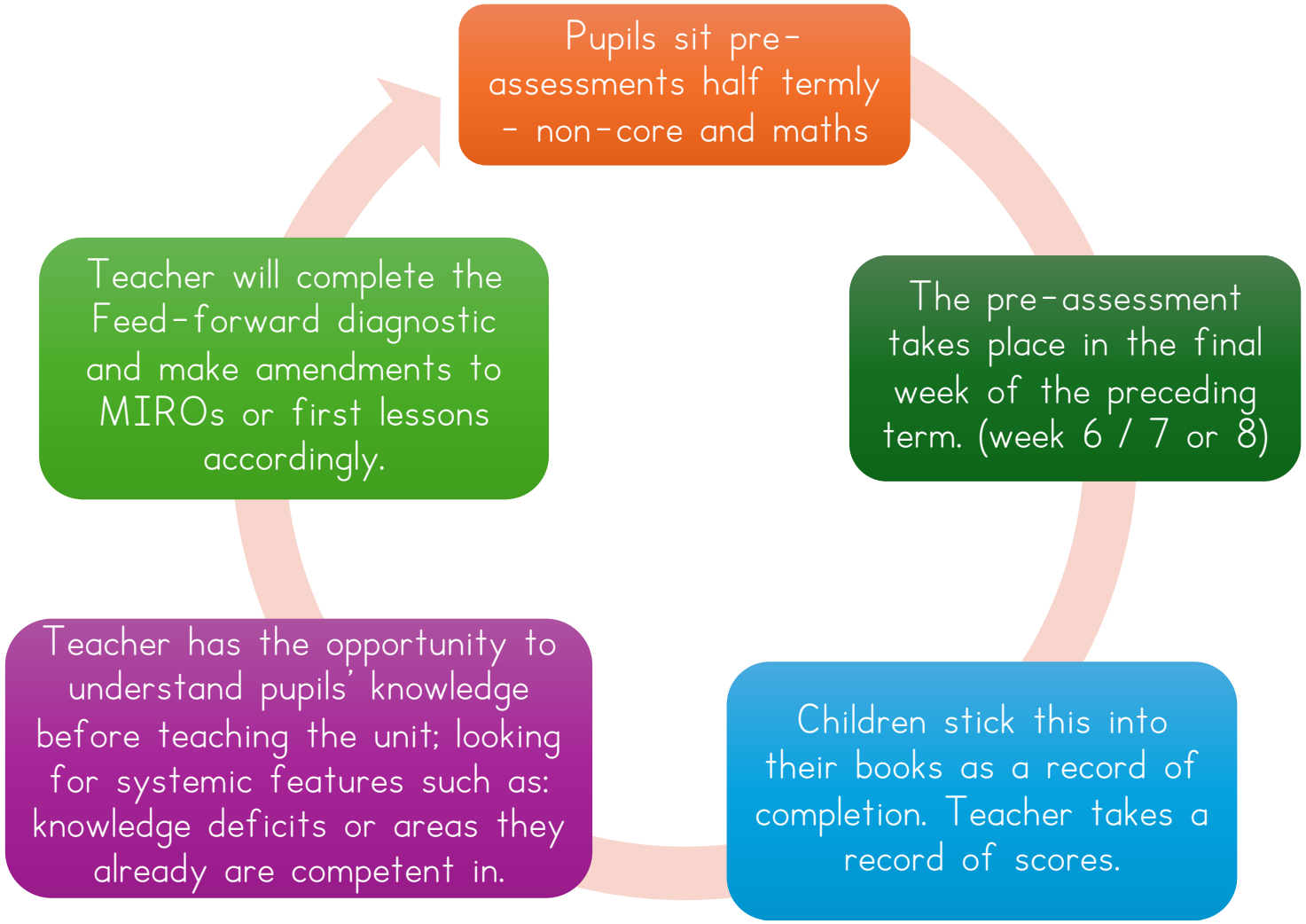
THE ST. MARY'S PARTNERSHIP

Assessment & Feedback: Feed Forward Diagnostic

Subject:	Science	Assessment:	Pre	✓	Post		Exit		Group/Set:	Blue	Year: 3 5
Assessment score average for the class:	5 / 8	Context:	PP	8	SEN	2	EAL	11	Unit of work:	Spr1 Properties.	

Misconceptions:	Missing prior knowledge: (Vocabulary/Disciplinary/Substantive)	Barriers to learning:
50% have reversible and irreversible the wrong way around. Similarly, misconception around insulators and if they're able to pass sound.	<60% incorrectly matched evaporate - demonstrating insecurity in the process. Confusion over a solute - chn connecting this to a liquid. Some unable to explain the difference between types of changes.	- Some needed the question read aloud (poor readers). - Definition matching - some struggled.
Who? – Specific children	**Who? – Specific children**	**Who? – Specific children**
All blue table All green table Maisie, William.	All blue/green table Maisie + William (Yellow).	Oscar - blue.
How will these misconceptions be addressed?	**What previous units do you need to link to and teach?**	**Overcoming barriers to learning:**
Do now - match starter. Physical demonstration of insulators.	Go back to Y2 "Everyday Materials" and Y4 "States of Matter" - cover content re: evaporation.	TA read out/ scribe.

Prior-knowledge check - takeaway



The process of checking learning and acquired knowledge <u>after a lesson</u>

Pupils access an exit ticket - this is a key question linked to the LI

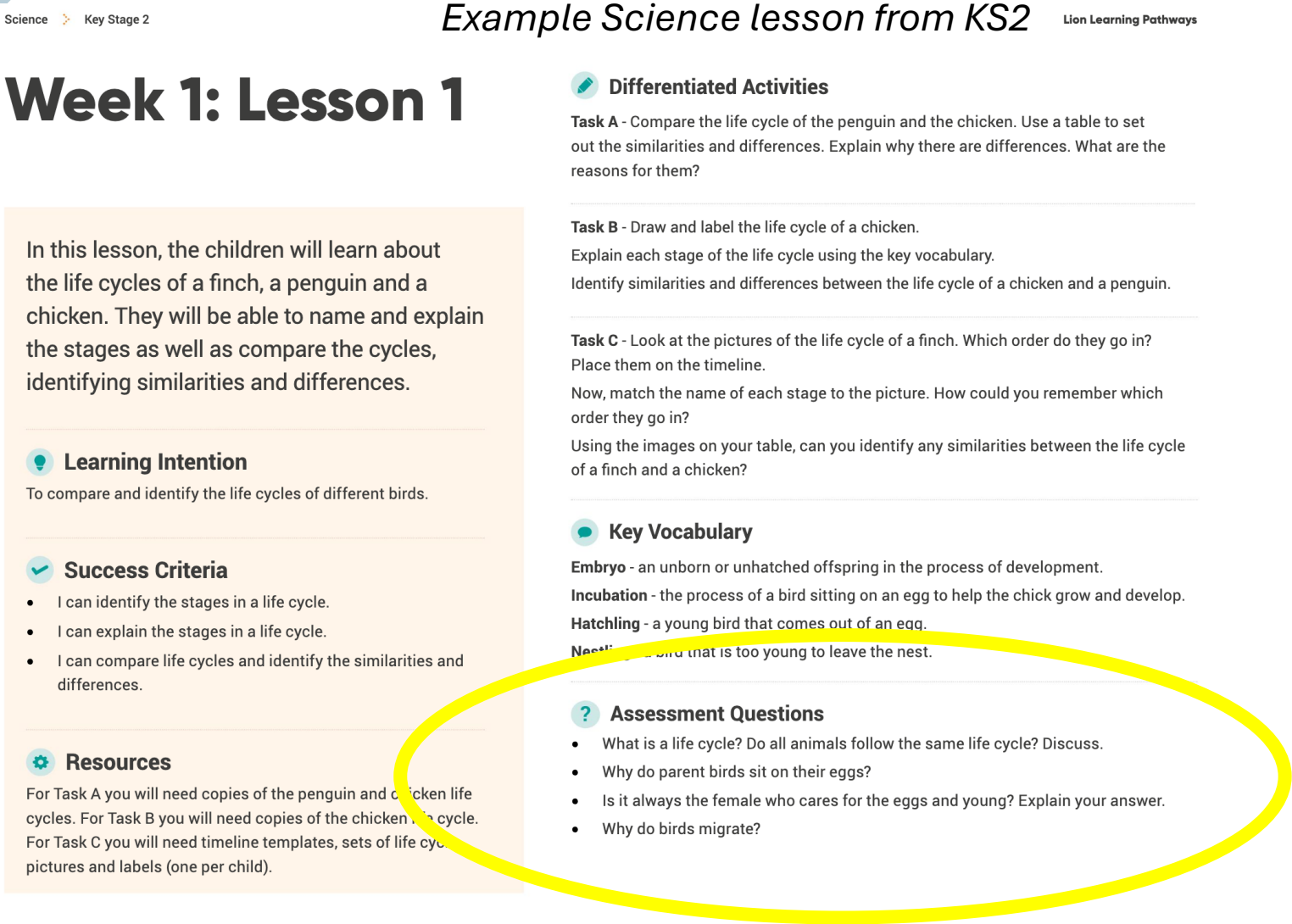
- Teacher creates an exit ticket that incorporates the assessment question(s) from the LAT planning
- Pupils independently answer these

Pupils complete the exit ticket to demonstrate their understanding of the learning intention

- Teacher looks at the scope of answers and plans a response to supporting those who haven't understood/achieved the learning

Where do exit ticket questions come from?

Example Science lesson from KS2



Science › Key Stage 2

Lion Learning Pathways

Week 1: Lesson 1

In this lesson, the children will learn about the life cycles of a finch, a penguin and a chicken. They will be able to name and explain the stages as well as compare the cycles, identifying similarities and differences.

Learning Intention

To compare and identify the life cycles of different birds.

Success Criteria

- I can identify the stages in a life cycle.
- I can explain the stages in a life cycle.
- I can compare life cycles and identify the similarities and differences.

Resources

For Task A you will need copies of the penguin and c[illegible]icken life cycles. For Task B you will need copies of the chicken [illegible] cycle. For Task C you will need timeline templates, sets of life cyc[illegible] pictures and labels (one per child).

Differentiated Activities

Task A - Compare the life cycle of the penguin and the chicken. Use a table to set out the similarities and differences. Explain why there are differences. What are the reasons for them?

Task B - Draw and label the life cycle of a chicken.

Explain each stage of the life cycle using the key vocabulary.

Identify similarities and differences between the life cycle of a chicken and a penguin.

Task C - Look at the pictures of the life cycle of a finch. Which order do they go in? Place them on the timeline.

Now, match the name of each stage to the picture. How could you remember which order they go in?

Using the images on your table, can you identify any similarities between the life cycle of a finch and a chicken?

Key Vocabulary

Embryo - an unborn or unhatched offspring in the process of development.

Incubation - the process of a bird sitting on an egg to help the chick grow and develop.

Hatchling - a young bird that comes out of an egg.

Nestl[illegible] - [illegible] bird that is too young to leave the nest.

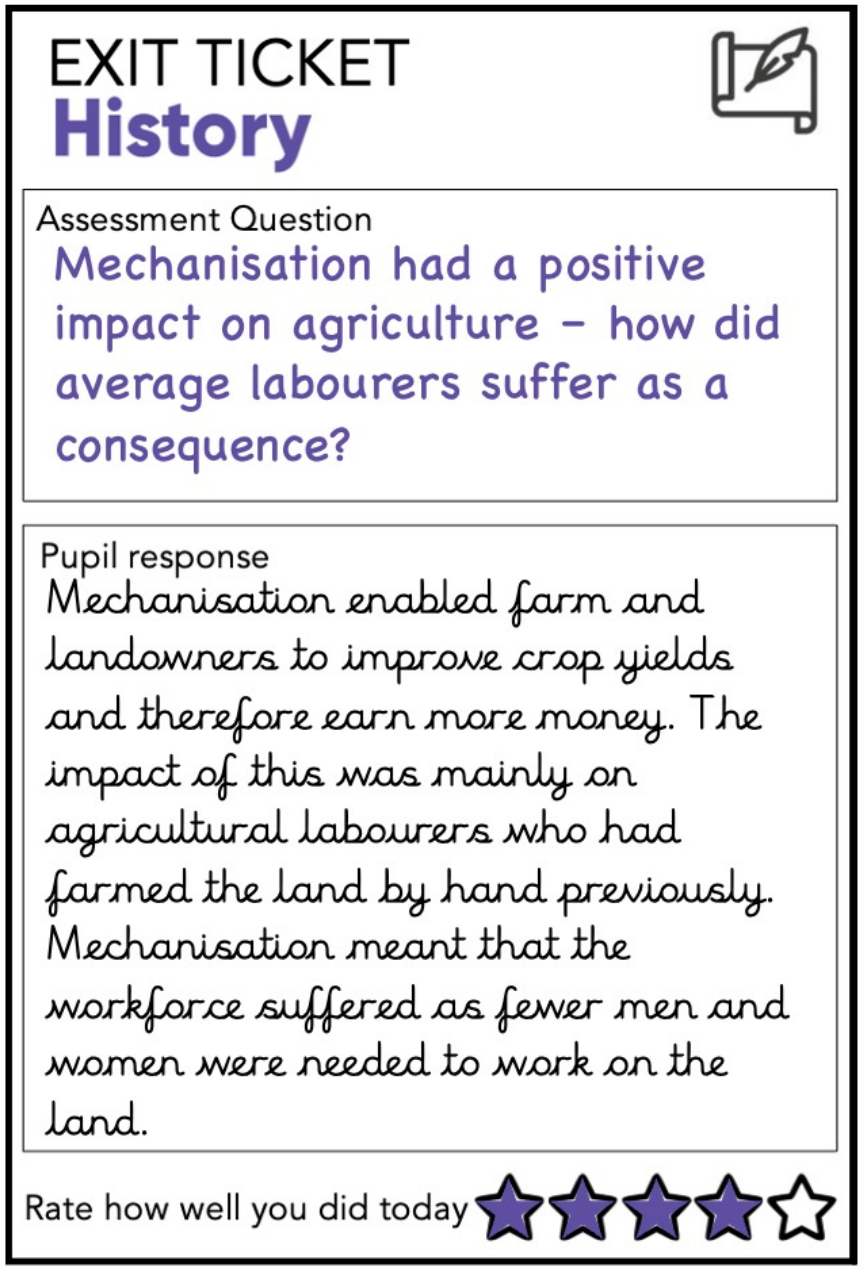
Assessment Questions

- What is a life cycle? Do all animals follow the same life cycle? Discuss.
- Why do parent birds sit on their eggs?
- Is it always the female who cares for the eggs and young? Explain your answer.
- Why do birds migrate?

Assessment of knowledge and skills

All pathways of our non-core curriculum contain assessment questions that are unique to the learning intention being studied.

This ensures that the children are applying key knowledge or skills from the lesson.



The purpose of exit tickets:

1. To have an independent application of a key question that helps us to understand how successful the child has been at achieving the learning intention.

2. To ensure that teachers have an accurate insight of the child's understanding – including new knowledge or skill application.

3. To support the teacher in being able to ascertain what may have been mis-understood (misconception) or may need further reinforcing.

Feed-forward exit ticket

THE ST. MARY'S PARTNERSHIP

Assessment & Feedback: Feed Forward Diagnostic

Subject:	History	Assessment:	Pre		Post		Exit	✓	Group/Set:	Blue	Year:	6.
Assessment score average for the class:	n/a	Context:	PP	11	SEN	2	EAL	6	Unit of work:	Anti Industrial Rev.		

Misconceptions:	Missing prior knowledge: (Vocabulary/Disciplinary/Substantive)	Barriers to learning:
That all people were welcoming of mechan-isation. Failing to see the impact on rural communities. That agriculture was a thriving industry – pupils misunderstand need to move to cities.	Some do not understand the idea of Britain being part of an Empire. Some lack the connection to trade and Manchester / Liverpool becoming huge cities for exports.	
Who? – Specific children	**Who? – Specific children**	**Who? – Specific children**
All blue table	All blue table + Daniel, Faye.	
How will these misconceptions be addressed?	**What previous units do you need to link to and teach?**	**Overcoming barriers to learning:**
Show the maps (Miro lesson 2) and population distribution.	Y5 – Empire – reteach the lessons on expansion. Make links to Geog + North West.	

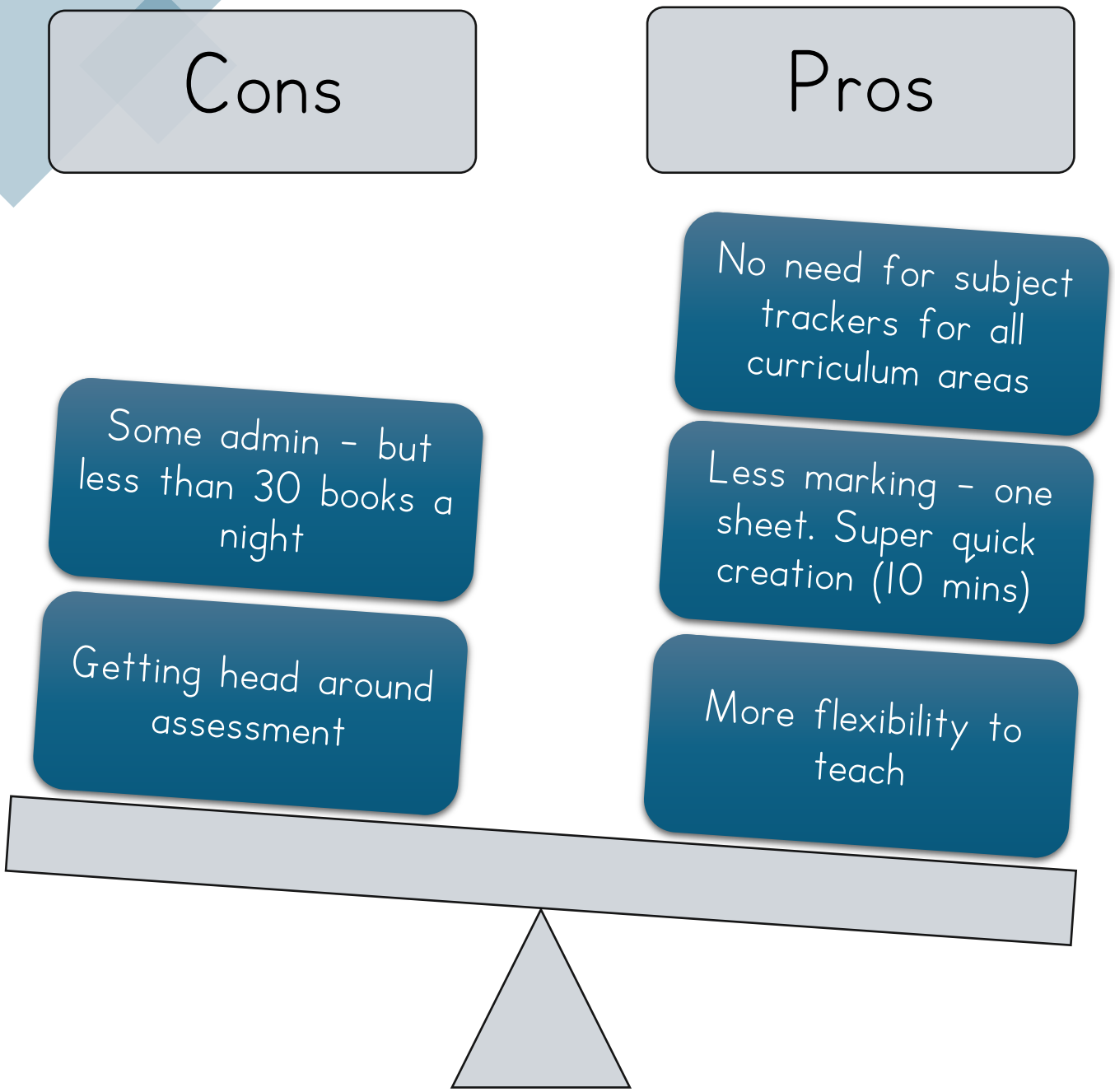
Frequency of assessment at purposeful key points

Teachers need to be able to check on learning at key points – including the end of lessons.

- We want to avoid onerous systems and tracking of objectives that doesn't help us to see pupil progress
- We want teachers to demonstrate concrete understanding of what they're teaching rather than ploughing through the planned curriculum
- We want pupil outcomes to signal acquired knowledge and skills and for teachers to pick up where this isn't the case.

What will this look like in Autumn 1?

Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8
AUT 1 Prior knowledge quizzes – Hist, Sci, Geo, Comp, Art & Maths | Complete diagnostic	History exit tickets (1) | Complete diagnostic | Amend teaching	Geography exit tickets (1) | Complete diagnostic | Amend teaching	Science exit tickets (1) | Complete diagnostic | Amend teaching	History exit tickets (2) | Complete diagnostic | Amend teaching	Geography exit tickets (2) | Complete diagnostic | Amend teaching	Science exit tickets (2) | Complete diagnostic | Amend teaching	AUT 2 Prior knowledge quizzes – Hist, Sci, Geo, Comp, Art & Maths completed | Complete diagnostic



With all improvement, we need to consider the pros/cons of a pedagogical approach.

- Teachers will no longer need to track tedious national curriculum objectives – creating hours of unnecessary admin.
- Fewer books need to be marked – with a record of evidence of engaging in feedback.
- We give teachers greater flexibility to deliver the curriculum as they see fit – ensuring knowledge/skill deficits are eradicated.