Technology impact challenge

Unit 1 · New and emerging technologies · matches the "Technology impact challenge" lesson slides (about 60 minutes)

Teacher notes for someone teaching this lesson without a Design and Technology background, including a cover or supply teacher standing in for the usual class teacher.

IF YOU ONLY DO ONE THING (RUSHED COVER LESSON)

If you only do one thing: make sure every pupil can say what "Evaluate" means in their own words before the lesson ends. Weigh up both sides with examples and reach a judgement. Ask two or three pupils to explain it back to you - do not just ask "does that make sense?".

Key facts in plain language

These are the facts this lesson depends on. They are written in plain English, not subject jargon, so you can say them in your own words while you teach.

Evaluate:
Weigh up both sides with examples and reach a judgement.

Explain:
Say why or how, using "because" or "so".

Describe:
Say what something is like or what happens.

Stakeholder:
Anyone affected by a decision: owners, workers, customers, community.

Common misconceptions

Drawn from the wrong answers pupils pick in this lesson's own question bank, paired with the explanation that is already written for the right answer.

Pupils may think: "Describe what happens in detail" is correct.
Why it is wrong: the correct answer is "Weigh up both sides and give a judgement". Top answers give positives and negatives with examples, then reach a reasoned judgement.

Pupils may think: "Also" is correct.
Why it is wrong: the correct answer is "Because". "Because" links a point to its reason.

Pupils may think: "Batch production" is correct.
Why it is wrong: the correct answer is "Just-in-time". Making to order means little is wasted or kept in stock.

Pupils may think: "It is made from recycled materials" is correct.
Why it is wrong: the correct answer is "It actually reaches industrial composting". Otherwise it can end up in landfill or contaminate recycling.

Pupils may think: "Automate every process at the same time" is correct.
Why it is wrong: the correct answer is "Introduce it gradually with retraining". Gradual change with training keeps the benefits and reduces the harm to workers.

Talking points to follow the slide deck

The slide deck for this lesson follows the usual DT Classroom shape: a retrieval starter, then each key term below in turn, worked examples, exam-style practice, then an exit ticket. Use these lines as you reach each part - they are the same facts as above, just phrased as something you can say out loud.

When the deck reaches "Evaluate": say — Weigh up both sides with examples and reach a judgement. Ask: "can someone give me an example?"

When the deck reaches "Explain": say — Say why or how, using "because" or "so". Ask: "can someone give me an example?"

When the deck reaches "Describe": say — Say what something is like or what happens. Ask: "can someone give me an example?"

When the deck reaches "Stakeholder": say — Anyone affected by a decision: owners, workers, customers, community. Ask: "can someone give me an example?"

Worked answers to this lesson's questions

The same question bank used for this lesson's knowledge organiser self-check and worksheet exam practice. Use this page as the answer key, or cover the right-hand explanation and hand out the questions as a silent task (see the cover lesson box below).

1. An "evaluate" question needs you to…

a) Describe what happens in detail, b) Weigh up both sides and give a judgement, c) Give the reasons why something happens, d) List as many relevant facts as you possibly can

Answer: b) Weigh up both sides and give a judgement. Top answers give positives and negatives with examples, then reach a reasoned judgement.

2. Which word best shows an explanation?

a) Also, b) Firstly, c) Because, d) However

Answer: c) Because. "Because" links a point to its reason.

3. A bakery bakes only what customers order online. Which idea is this?

a) Batch production, b) Mass production, c) Market pull, d) Just-in-time

Answer: d) Just-in-time. Making to order means little is wasted or kept in stock.

4. Compostable packaging is only better if…

a) It actually reaches industrial composting, b) It is made from recycled materials, c) It is put in the household recycling bin instead, d) It is thinner than plastic packaging

Answer: a) It actually reaches industrial composting. Otherwise it can end up in landfill or contaminate recycling.

5. Which is the best first step for a small business introducing automation?

a) Automate every process at the same time, b) Buy the largest machines it can afford, c) Introduce it gradually with retraining, d) Wait until all competitors have automated

Answer: c) Introduce it gradually with retraining. Gradual change with training keeps the benefits and reduces the harm to workers.

READY-TO-RUN COVER LESSON

Project the existing lesson slides as normal; read the key facts and talking points above before the lesson starts.

Low-prep silent task (needs no workshop tools or machinery): write or display the numbered questions above without the "Answer:" line, and have pupils answer them in silence on paper. Mark from the answers above at the end, or next lesson.

If the lesson plan calls for tools, machinery, heat or anything hands-on, do not run that part as a non-specialist cover teacher - set the silent task above instead and leave the practical for the subject teacher. See the general workshop safety guide in the Teachers hub.