

# D&T Subject Leader Development Meeting

Led by Naomi Hiscock, Director

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**Primary STEM**  
Education Consultancy

# Introductions

## Director

The screenshot shows the Primary STEM Education Consultancy homepage. At the top left is the logo, and to its right is a navigation bar with links for Home, Advice, CPD, Projects, Resources, and About. Below the navigation bar is a grid of four images. The first image shows a man and a woman at a table. The second shows a woman working with materials. The third shows a woman looking at a document. The fourth is a graphic with a magnifying glass and the text 'PLAN Planning for assessment'. Below the images is a purple bar with icons and labels for Advice, CPD, Projects, and Resources.

## Sign up to our newsletter

The screenshot shows the Primary STEM website with a focus on newsletter sign-up. The navigation bar includes Home, Advice, INSET & CPD, Projects, Resources, and About. A purple box highlights the 'Resources' link, with an arrow pointing to a sub-menu containing 'Our resources', 'Subject leaders', and 'Teachers'. Below the navigation bar is a 'Filter by' section with a dropdown menu. The 'Newsletters' option is highlighted with a purple arrow. To the right, there are three featured resource cards: 'SCARABEUS AERIAL THEATRE' (Flying into Physics), 'D&T role models' (D&T Role Models), and 'D&T Assessment Sheets - Key Stage 1 & 2' (D&T Assessment Sheets - Key Stage 1 & 2).

# Introductions

**Primary Ambassador**



**Regional Support Organisation**



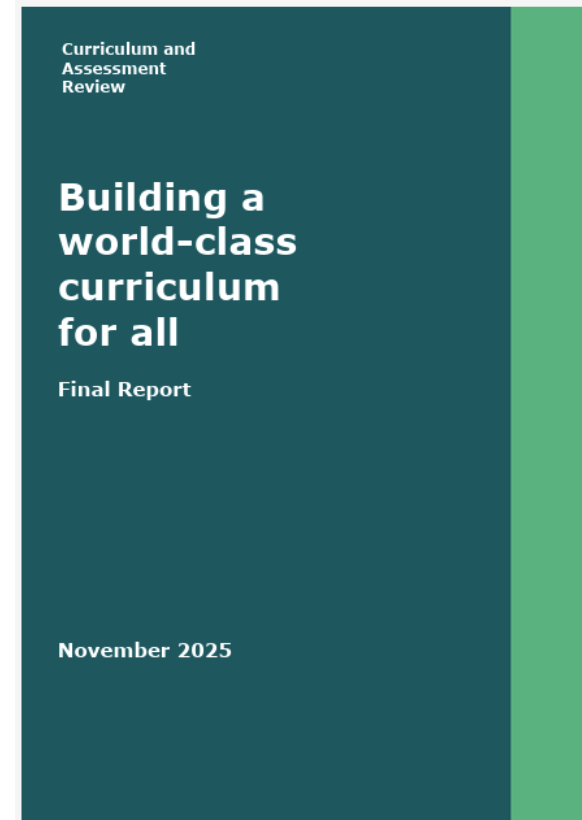
# Agenda

- Subject updates
- Changes to Ofsted inspections
- Leading effective CPD
- Discussion time – choice of
  - SEND - novice
  - Assessment - novice
  - How to raise the profile of D&T - experienced
  - Discussion around what units work well in other schools - experienced

# Subject updates

# Curriculum and Assessment Review published

- The Government has just published the conclusions and recommendations of its independent review of the curriculum, assessment and qualifications system in England.
- From a rapid review of the content of the final report, it does not appear to propose major changes to either the science or D&T curriculum. Once we have had a bit more time to digest the report's contents, we'll publish a blog on our website with our thoughts on the recommendations and their implications for leading and teaching science and D&T.
- To download a copy of the report, visit the [gov.uk website](https://www.gov.uk) where you can also find the [Government's response](#).



# British Science Week Taster Pack

- The theme for British Science Week 2026 (6-15 March 2026) is 'Curiosity: what's your question?' The full activity packs will be available in January 2026, but you can get started by exploring the taster pack which has just been published.
- To download the taster pack, visit the [British Science Week website](https://www.britishsienceweek.org).



# Bringing Robotics Engineering into the Classroom

- This funded professional learning opportunity, offered by Engineering Educates, is designed to equip teachers with the knowledge, confidence, and classroom-ready tools to embed engineering in their teaching in alignment with the National Curriculums for D&T, Computing and Science.
- It is based on The University of Manchester's SEERIH's research with the Royal Academy of Engineering, and will develop curriculum confidence and explore practical ready-to-use resources to inspire learners to think and work as an engineer, using real-world contexts from robotics. It is offered on three dates in venues in different parts of the country. One of them is in London (see below).
- **24 February 2026** - British Science Association, Wellcome Wolfson Building, London SW7 5HD
- This opportunity is particularly relevant for D&T teachers, D&T leads and curriculum leads across Key Stages 2 and 3 and includes a £200 bursary to cover supply costs. To find our more and book a place, visit [their Eventbrite page](#).



**Engineering in the curriculum**  
**Funded Professional Learning Opportunity**

The University of Manchester's SEERIH invites KS2 & KS3 Design & Technology, Science/STEM teachers to a funded day of professional learning.

09:00 - 16:00  
Tuesday 11<sup>th</sup> November 2025, York  
Tuesday 20<sup>th</sup> January 2026, Cumbria  
Tuesday 24<sup>th</sup> February 2026, London

£200 bursary to cover supply costs



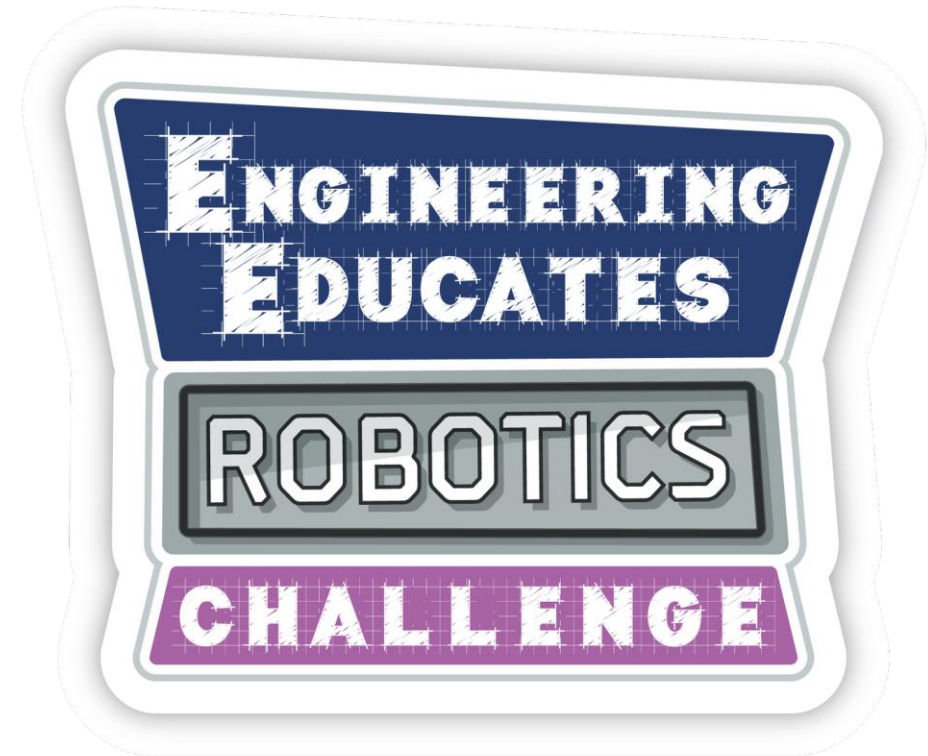
In partnership with



[engineeringeducates.org](http://engineeringeducates.org) @EngEdChallenge #EngEdChallenge


# EngEd Toolkit

- Engineering Educates' EngEd Toolkit is a generic set of prompts to support teachers anywhere to introduce the Engineering Design Process into their classrooms. If you are leading the development of engineering across your school or experimenting with how to embed engineering ideas in your lessons, the EngEd Toolkit provides downloadable resources, including 'Think as an engineer' and 'Create as an engineer'. 'Think as an engineer' contains design specification templates, a 5Ds decision maker and more. 'Create as an engineer' contains making guides and skills videos that can be used for teacher CPD or directly in the classroom.
- To download the resources, [register for free on the Engineering Educates website](#).



# Health and safety

**WATCH OUT FOR THIS TERM'S ISSUE OF CLEAPSS PRIMARY MAGAZINE EXPLORE.**



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# Changes to Ofsted inspections

# Renewed inspection framework - Ofsted

- No routine inspections in Autumn 1.
- In use from 10 November 2025
  - Initially with schools that volunteer for inspections
  - Routine inspections begin 1 December
  - No routine inspections week before Christmas

*Government press release, 10 September 2025*

# Types of inspection

- Full inspections (previously known as graded inspections or section 5 inspections). School is graded against each of the evaluation areas.
- Monitoring inspections (carried out under section 8 of the Education Act 2005). Schools are monitored where a prior need for improvement has been identified.

# Before an inspector arrives

## Notification call

Provider leaders invited to identify an individual(s) to act as **nominee(s)** – not compulsory.



## Timetable for inspection

to enable inspectors to gather evidence relevant to the provider's context.

## Nominee

help the inspection process run smoothly and collaboratively through planning, communication and engagement with the inspection team

## Planning call/s

the lead inspector will work collaboratively with the nominee(s) and leaders to identify any necessary reasonable adjustments and understand the context

# Planning call – inspection activities

Plan with leaders what inspection activities are required to gather the necessary evidence to:

- celebrate what leaders have identified as strengths
- validate the priorities leaders have identified for improvement, and whether they have an effective plan to bring about the desired impact
- highlight where there is more to do to ensure that all pupils achieve, belong and thrive

# Planning call - case sampling

Inspectors will choose a representative sample of approximately 6 pupils for case sampling, always including (where relevant)

- a child with an education, health and care (EHC) plan and, where possible, a disabled child
- a looked-after child
- a child known, or previously known, to social care
- a child who receives pupils premium funding
- a child from any other group that leaders have identified as significant to the context in which they work

## How the inspection will be structured: Day 1

- Single central record will be checked early on day 1.
- Gathering first-hand evidence of pupils' experiences through:
  - discussions with pupils at the start of the day and social times
  - learning walks with leaders (including discussions with pupils and looking at their work)
  - considering, in detail, the experiences of pupils identified for case sampling.
- Learning walks.
- Dedicated reflection meetings with leaders.
- Focused leadership meetings, including safeguarding.



## How the inspection will be structured: Day 2

- Begins with a reflection meeting with leaders and nominee.
- May continue to:
  - involve some focused meetings such as governance or speaking to the local authority or diocese
  - gather evidence as confirmed at the end of day 1
  - include reflection meetings with leaders/nominee
  - adapt inspection activity accordingly to explore further as/if required.
- Concludes with a grading meeting followed by a final feedback meeting.
- **Case sampling and learning walks will support throughout.**



# Evaluation areas

## New framework

- Safeguarding – Met/Not met
- **Inclusion**
- **Curriculum and teaching**
- **Achievement**
- Attendance and behaviour
- Personal development and well-being
- **Early years**
- Leadership and governance

## Previous framework

- Overall
- Quality of education
- Behaviour and attitudes
- Personal development
- Leadership and managements
- Early years provision

# Grading

- Urgent improvement
  - Needs attention
  - Expected standard
  - Strong standard
  - Exceptional
- 
- Safeguarding – Met/Not met

# State funded school inspection toolkit - Ofsted

## Curriculum and teaching

This evaluation area considers whether:

- leaders design a high-quality, ambitious curriculum for all pupils (the intent), paying particular regard to disadvantaged pupils, those with SEND, those who are known (or previously known) to children's social care, and those who may face other barriers to their learning and/or well-being
- leaders and staff deliver the curriculum effectively (the implementation) across all subjects, year groups and key stages
- leaders make sure that pupils build strong foundations for accessing the curriculum and for later success, including academic achievement, good health and well-being

# State funded school inspection toolkit - Ofsted

## School and subject curriculum

**In gathering evidence about the curriculum (including subject curriculums), inspectors consider the extent to which:**

- the curriculum is coherently planned and sequenced so that pupils build knowledge and skills sequentially and cumulatively
- time is available within the curriculum for revisiting content and dealing with gaps in knowledge and skills
- the curriculum has subject-specific rigour, so that pupils gain disciplinary knowledge and can answer subject-specific questions
- leaders and teachers have a sophisticated understanding of the differences between subjects; this informs teachers' choices and helps leaders precisely evaluate quality and take targeted actions for improvement
- decisions about the curriculum are refined over time, based on evidence and insight from within and beyond the school

# State funded school inspection toolkit - Ofsted

In gathering evidence about the **curriculum in early years** inspectors consider the extent to which:

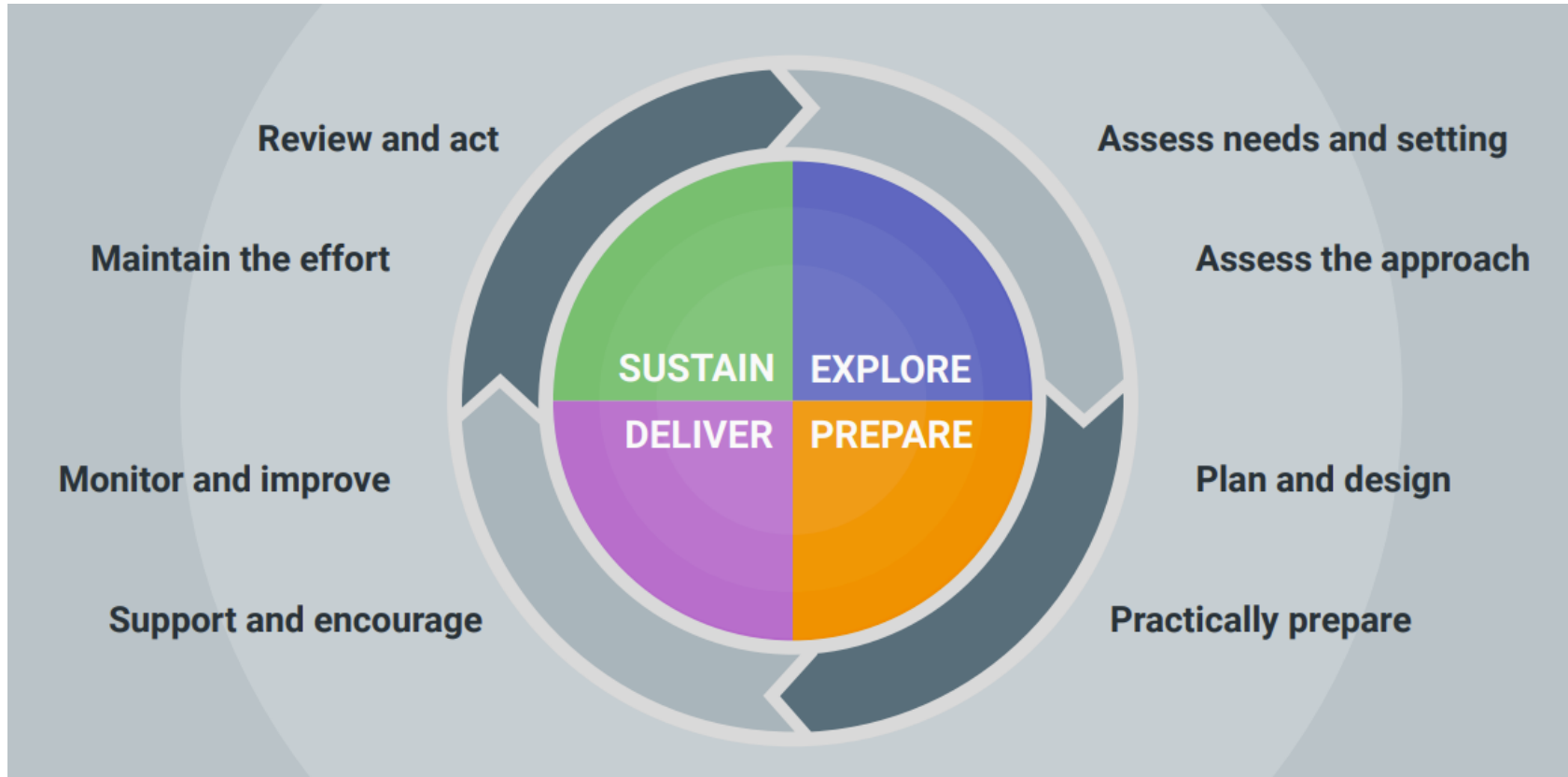
- the curriculum supports all children's progress through the EYFS educational programmes, appropriate to their age and stage of development; it clearly identifies the foundational knowledge and skills that children need for later learning, and emphasises children's communication and language development
- the Reception Year curriculum for teaching systematic synthetic phonics, spelling and handwriting is logically sequenced and cumulative
- the mathematics curriculum is designed to develop children's confidence about and use of mathematical vocabulary, and gives them a secure grounding in number, numerical patterns and spatial reasoning

# Grading curriculum and teaching

Needs attention	Expected standard	Strong standard
<p><b>Curriculum and teaching are likely to be graded 'needs attention' when the expected standard has not been met.</b></p> <p><b>This may include when one or more of the following applies:</b></p> <ul style="list-style-type: none"> <li>Leaders' ambitions for the curriculum and teaching are appropriate, but weaknesses or inconsistencies in implementation have a negative impact on pupils in general or on a particular group.</li> <li>Leaders have only recently started to take action to improve the curriculum and teaching. While their actions are appropriate, they are at an early stage. This means it is too soon to determine the impact of this work.</li> <li>Leaders have considered appropriate adaptations to teaching for disadvantaged pupils, those with SEND, those who are known (or previously known) to children's social care, and those who may face other barriers to their learning and/or well-being, but these adaptations are not well matched to pupils' needs.</li> </ul>	<p><b>Curriculum and teaching meet the 'expected standard' when all the following apply:</b></p> <p>Leaders have an accurate and informed understanding of the quality of the curriculum and teaching across the school. They draw on this when deciding how to deploy staff and allocate resources, and to identify when timely action is needed to bring about improvement.</p> <p>Leaders ensure that the curriculum is suitable and well planned for each subject and year group. It identifies clear end points and is appropriately sequenced to build on what has already been taught and learned.</p> <p>Leaders ensure that the curriculum is generally taught well. Teachers draw on their knowledge of pupils' needs and starting points and an evidence-informed understanding of effective teaching and how pupils learn.</p> <p>Leaders make sure that teachers have, or gain, the expertise they need for the subjects and phases they teach.</p> <p>Leaders ensure that all pupils who are at the early stages of learning to read are taught to do so through systematic synthetic phonics.</p> <p>Leaders and staff are particularly aware of pupils who have not yet secured the necessary</p>	<p><b>Curriculum and teaching meet the 'strong standard' when the 'expected standard' has been met and all the following apply:</b></p> <p>Leaders make astute decisions about how the curriculum and teaching should adapt and evolve, based on their evidence and insight about how well pupils have learned what was intended.</p> <p>Leaders ensure that the curriculum is of a consistently high quality across subjects and year groups. Leaders have a sophisticated understanding of the differences between subjects, so that pupils' learning at each stage can be secured quickly and shaped carefully in the anticipation of future learning.</p> <p>Leaders ensure that the curriculum is consistently taught well. Highly effective teaching is embedded across subjects and year groups. Teaching ensures that pupils consistently develop their language and vocabulary, both spoken and written, and increase their reading competency, across subjects.</p> <p>Teachers consistently make highly effective choices about what to teach, and when and how to teach it, in the context of the subject, phase and pupils' needs.</p>

# Leading effective CPD

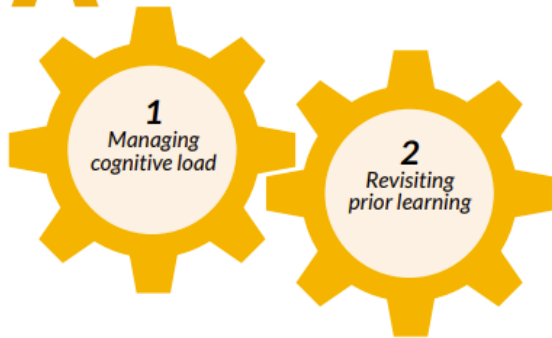
# EEF Guidance Report: A school's guide to implementation



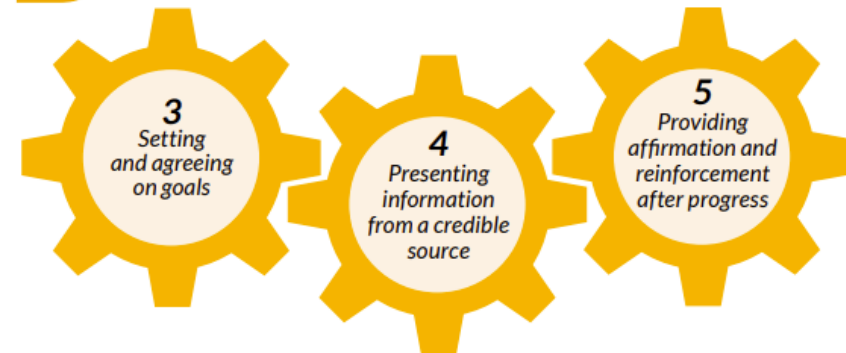
[A school's guide to implementation](#)

# Mechanisms for effective CPD

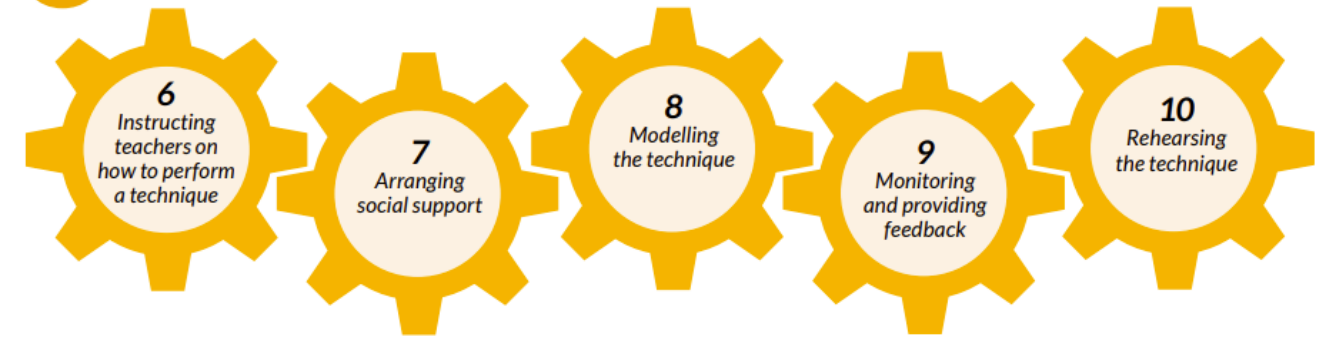
## A BUILDING KNOWLEDGE



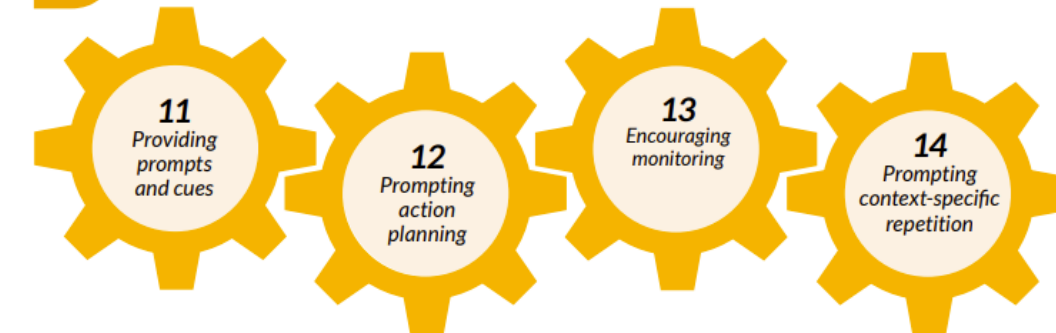
## B MOTIVATING TEACHERS



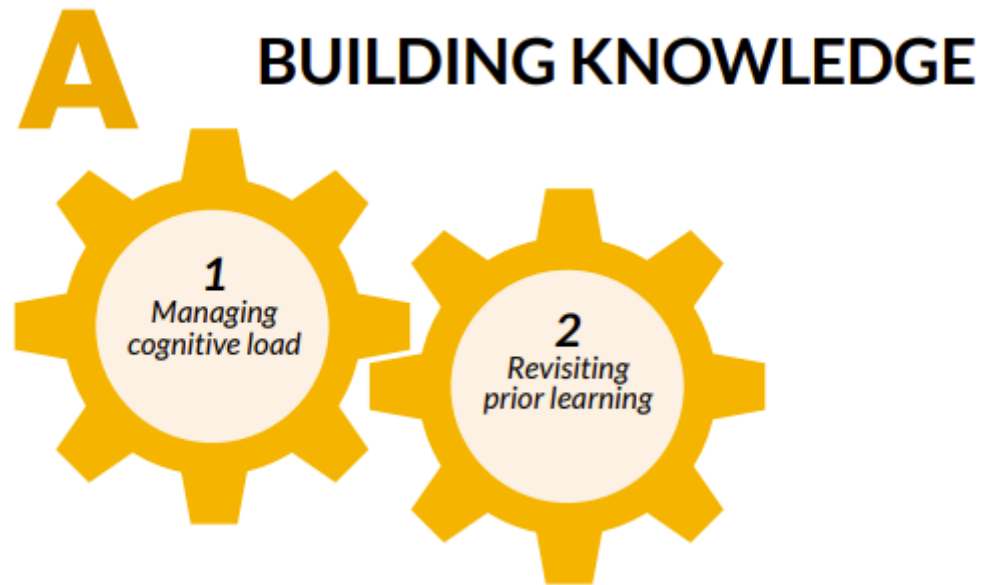
## C DEVELOPING TEACHING TECHNIQUES



## D EMBEDDING PRACTICE



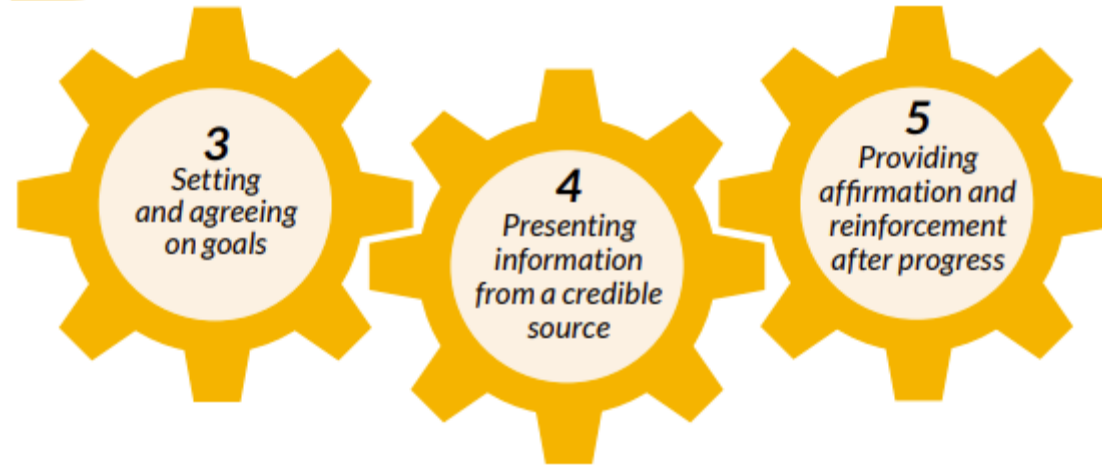
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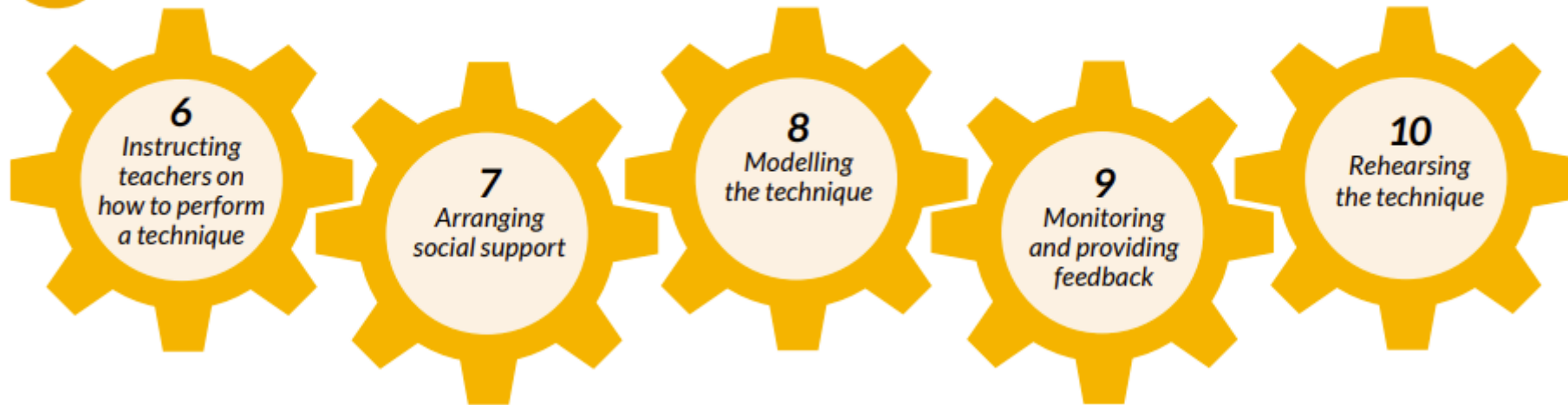
## B

### MOTIVATING TEACHERS



# Mechanisms for effective CPD

## C DEVELOPING TEACHING TECHNIQUES



# Mechanisms for effective CPD

**D**

## EMBEDDING PRACTICE



# Increasing our understanding of designing and mechanisms

# What do you remember?

- What activities make up a D&T project?

# Structure of a D&T project

- Investigative and Evaluative Activities (IEAs)
- Focused Tasks (FTs)
- Design, Make and Evaluate Assignment (DMEA)

# What do you remember?

- What design skills do the pupils learn in Key Stage 1 and 2?

# Technical skills - designing

## KS1

### Design

- design purposeful, functional, appealing products for themselves and other users based on design criteria
- generate, develop, model and communicate their ideas through talking, drawing, **templates**, mock-ups and, where appropriate, information and communication technology

## KS2

### Design

- use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups
- generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, **prototypes**, pattern pieces and computer-aided design

# What do you remember?

- What technical knowledge do the children learn in Key Stage 1 and 2?

# Technical knowledge

## Key Stage 1

### Technical knowledge

- build structures, exploring how they can be made stronger, stiffer and more stable
- explore and use mechanisms [for example, levers, sliders, **wheels and axles**], in their products.

## Key Stage 2

### Technical knowledge

- apply their understanding of how to strengthen, stiffen and reinforce more complex structures
- understand and use mechanical systems in their products [for example, gears, **pulleys**, cams, levers and linkages]
- understand and use electrical systems in their products [for example, series circuits incorporating switches, bulbs, buzzers and motors]
- apply their understanding of computing to program, monitor and control their products.

# 3-D mechanisms in Key Stage 1

Wheels and axles

# Key vocabulary

wheel

axle

axle holder

chassis

body



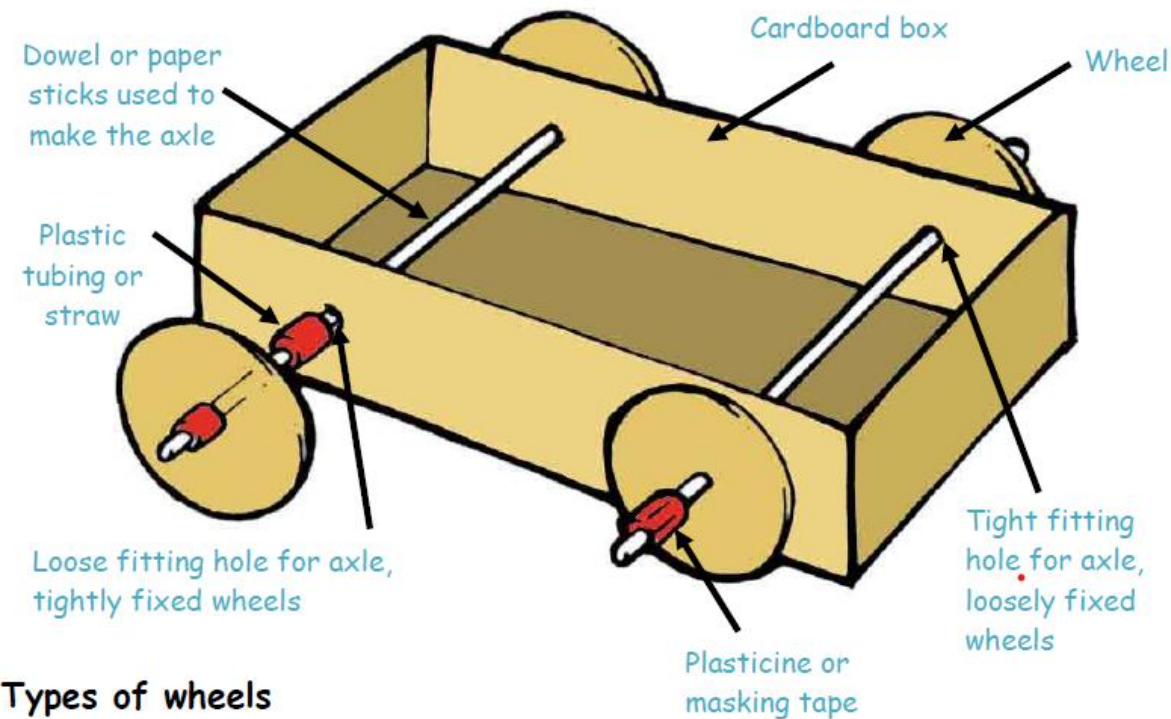
# Axle/wheel combinations

## Vocabulary

- Free moving
- Fixed

- Free moving axle
- Fixed wheel

Example of two different ways to fix wheels



Types of wheels

- Fixed axle
- Free moving wheel

# Free moving axles

Use large paper/plastic straws fixed with masking tape to the underside of a box. Check straws are positioned carefully so the vehicle will move in a straight line when the wheel and axle mechanisms are added. Make sure the straw hole is large enough to allow the axle to move freely. The wheels must be fixed tightly to the axle.



# Focused tasks

- Making wheels – using a template



# 3-D mechanisms in Key Stage 2

Pulleys

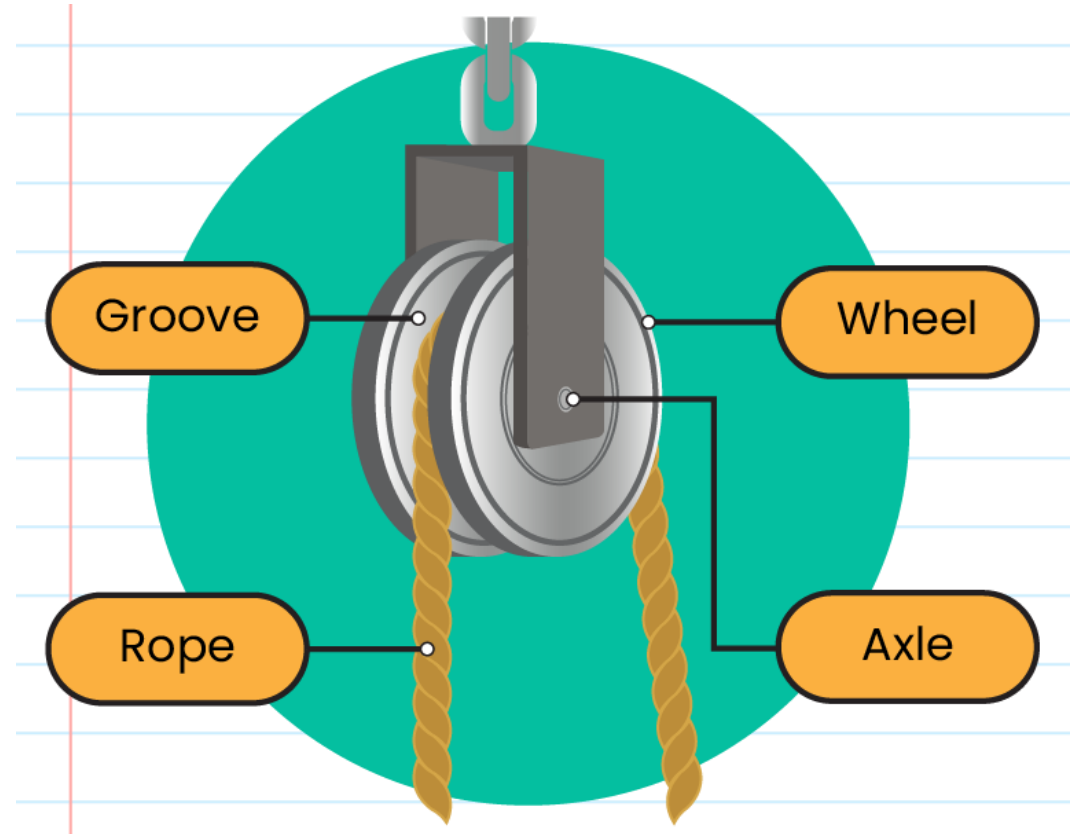
# Introduction

## What is a simple machine?

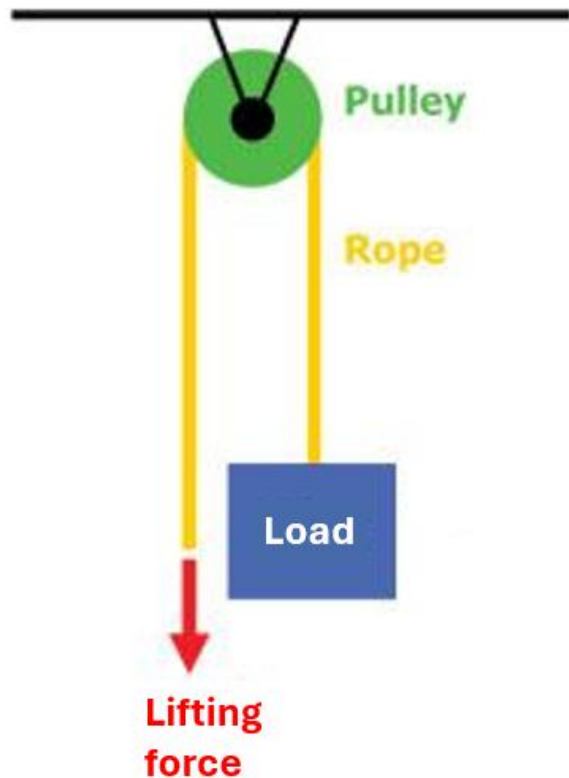
- It is a device that moves or lifts heavy loads.

## What is a pulley?

- A pulley is a wheel with a groove on which a rope passes through.



# A single pulley



- Used for lifting a load
- Think of examples of the use of pulleys

# Raising a bridge



# Making prototypes

Structures and mechanisms

# What is a prototype?



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KS2

# What is a prototype?

Part of [Design and Technology](#) | [Design](#)

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# Make a prototype

- Make a prototype of a bridge that is raised using a pulley



# Reviewing design approaches

## KS1

### Design

- design purposeful, functional, appealing products for themselves and other users based on design criteria
- generate, develop, model and communicate their ideas through talking, drawing, **templates**, mock-ups and, where appropriate, information and communication technology

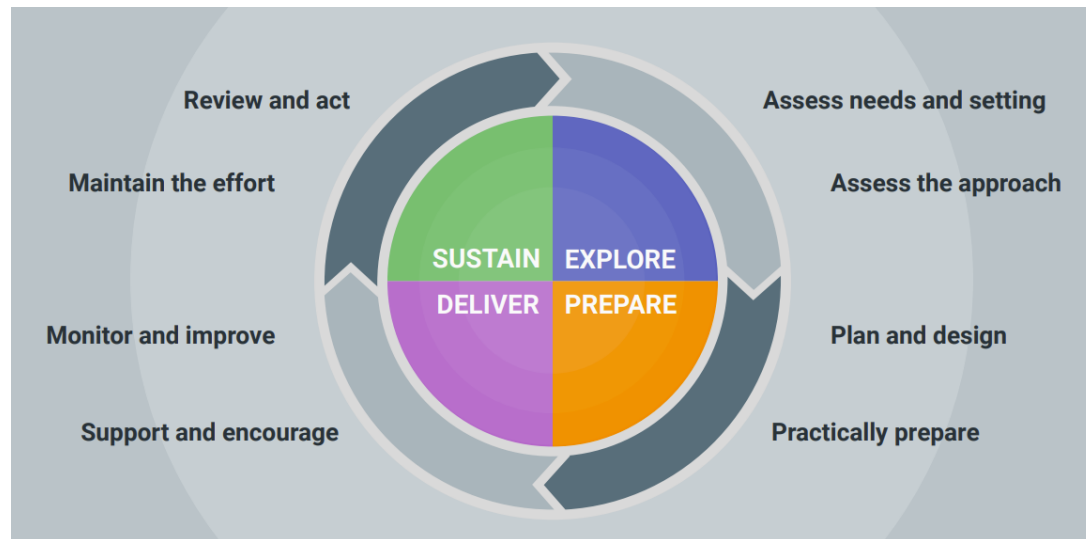
## KS2

### Design

- use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups
- generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, **prototypes**, pattern pieces and computer-aided design

**Identify where in your school curriculum different design approaches are used?  
Bring examples to share.**

# Action planning

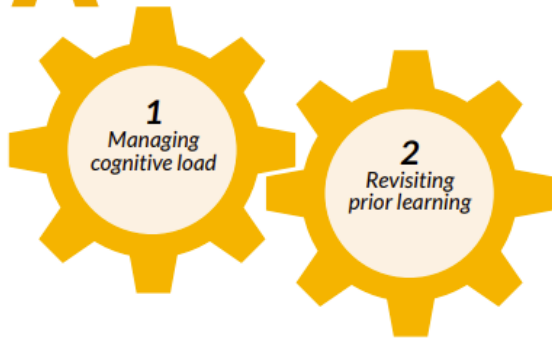


- What are your school's current CPD needs?
- How might you approach addressing this need?

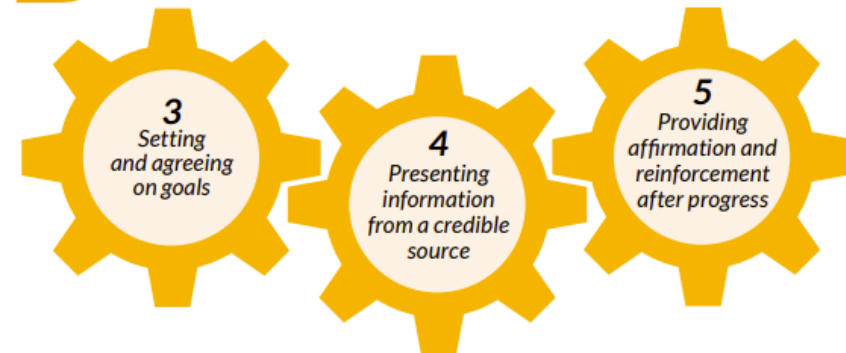
[A school's guide to implementation](#)

# Mechanisms for effective CPD

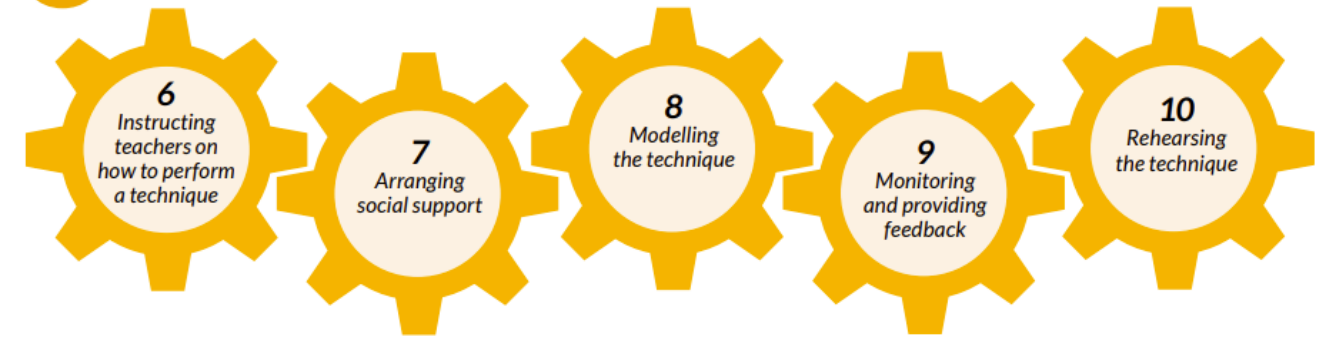
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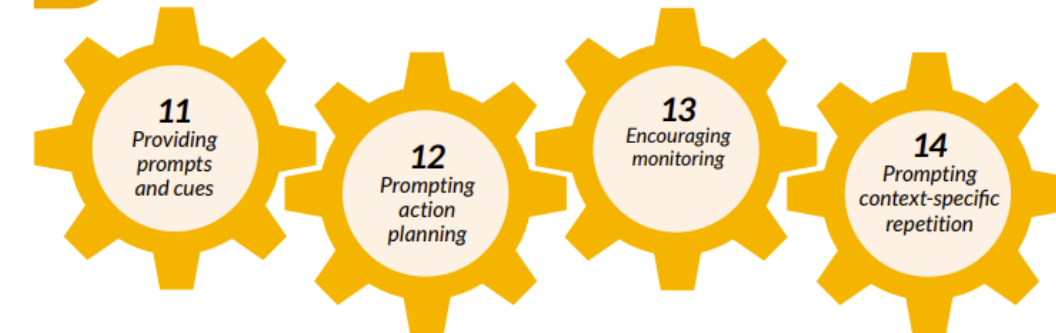
## B MOTIVATING TEACHERS



## C DEVELOPING TEACHING TECHNIQUES



## D EMBEDDING PRACTICE



# Feedback and evaluation

1. What were the main learning points for you today?
2. What impact will today have on you or your school?
3. What further support do you need?