

Planning Pro Forma Teacher's Session Plan

Careers Related Learning	Lesson Focus: KS1 - STEM Jobs in Construction, Manufacturing and Engineering	Key Stage One
National Curriculum / subject Links: Science, Design and Technology, Maths Discussion-lead learning - being able to link skills to jobs and link protective equipment to jobs.		
Learning Objectives <ul style="list-style-type: none"> • To learn what an Engineer's job role is. • To link protective equipment to job roles. 	Success Criteria <p>Children will be able to link things they enjoy doing and skills they have to jobs in Construction, Manufacturing and Engineering.</p> <p>Children will be able to explain what an Engineer is and how engineering links to so many aspects of their lives from the toys they play with to the classroom they are sitting in.</p> <p>Children will be able to understand why protective equipment is worn.</p>	Resources <ul style="list-style-type: none"> • Teachers Session plan • Teacher PowerPoint: • KS1 - STEM Jobs in Construction, Manufacturing and Engineering • Scissors • Glue • Pencils • Pupil Worksheets • Safety at Work

Teaching Input

Run through the PowerPoint (PPT) and discuss what STEM means and how this links to most careers.

Stop at slide 6: Ask children to look around the room and come up with 3 things that engineers might have made or might be responsible for.

The answer is that everything apart from the living things in the room will most likely have needed an engineer to help create them. They design and/or build everything around us.

If pupils are unsure of any vocabulary, stop and check understanding then go through these together.

Starter:

Slide 7 – start with making links to toys, tools, the laptop, SMART board and the link to Engineering with the objects being designed to overcome a problem. Link this with Maths, Science and Design and Tech where pupils often problem solve.

Main Activity:

Children complete the pupil activity worksheet: **Safety at Work**

In lots of jobs, it is important that you wear the correct Personal Protective Equipment to keep yourself safe from harm.

Discuss why protective equipment is worn and what job roles require safety equipment.

Differentiation in level of support given - give support as required and walk around the classroom to ensure children can work through the task either independently or in pairs or groups depending on ability.

Wow Factor / Did you know?

- Did you know that the word engineer comes from a Latin word meaning 'cleverness'
- Designed and built by engineers - the Great Pyramid of Giza was the tallest structure in the world for over 3800 years.
- Windscreen wipers were invented by a female engineer called Mary Anderson in 1903.

Assessment Questions – gather ideas from children and discuss as a whole class

- What is an Engineer?
- Why is it important to wear safety equipment?
- How do you problem solve?

Plenary / Memorable finish

Play this video of Rosie Revere, Engineer and discuss how both boys and girls can work as Engineers, Construction workers or Manufacturers making new products.

Rosie Revere, Engineer (Read Aloud) by Andrea Beaty | Storytime Science-Technology - YouTube