

Design and Technology Year 1 Spring 1

Mechanisms – sliders and levers – a robot scene

Prior Learning:

Reception Mechanisms: pop up/lift-the-flap book

- Look at a variety of books with pop-ups and flaps.
- Join different materials with glue/tape.
- Cut templates out.
- Fold and cut paper and card for a desired effect.

Future Learning:

- Y2 wheels and axles unit (making a moon buggy)
- Children will observe sliders and levers when they visit Worden Park playground in Y2.

Final Outcome: To make a robot scene linked to 'No-Bot' text using sliders and levers to help tell the story to friends.

Key Vocabulary	Objectives <i>taken from Progression Document</i>	Key Knowledge
lever slider fastening fastener fold tear cut straight curved	Design <ul style="list-style-type: none"> • Use pictures and words to convey what they want to design/make • Propose more than one idea for their product. • Select appropriate technique explaining: First... Next... Last... • Explore ideas by rearranging materials • Select pictures to help develop ideas • Use drawings to record ideas as they are developed. • Add notes to drawings to help explanations. • Describe their models and drawings of ideas and intentions. 	<p>Children will know that a slider is a mechanism which makes something move up, down, left or right.</p> <p>A lever is a mechanism which makes something pivot around a point.</p> <p>Levers are used for door handles or a seesaw. Sliders are used for a sliding bolt or for children's trays.</p> <p>Mechanism is when there are parts acting together to make an action take place.</p> <p>Sliders and levers can be used to make a moving picture.</p>

Make

- Discuss their work as it progresses.
- Select materials from a limited range that will meet the design criteria.
- Select and name the tools needed to work the materials (card, paper, felt, film, paint, scissors, glue, tape, hole punch)
- Explain what they are making.
- Explain which materials they are using.
- Name the tools they are using.
- Describe what they need to do next.

Mechanisms: Sliders and levers

- Join appropriately for different materials and situations e.g. glue, tape.
- Roll paper to create tubes.
- Fold, tear and cut paper and card.
- Cut along lines, straight and curved.
- Use a hole punch.
- Insert paper fasteners for card.
- Experiment with levers and sliders to find different ways of making things move.

Evaluate

- Explore existing products and investigate how they have been made.
- Talk about their design as they develop and identify good and bad points.
- Note changes made during the making process as annotation to plans/drawings.
- Say what they like and do not like about items they have made and begin to say why.

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| | <ul style="list-style-type: none">• Discuss how closely their finished product meets their design criteria and how well it meets the needs of the user. | |
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