

End of Unit Goal: To design and make a moving picture using a lever or slider, following design criteria.

Talk like a Designer Sentence Stems – I made this model because... I like/disliked this because... I think I can make this better by...

Date	Learning Objective	Learning Outcomes	Task/activity	Resources	Key Vocabulary
Lesson 1	I can explore and evaluate an existing moving picture books.	To generate, develop and communicate their ideas through talking and templates. To explore and evaluate a range of existing products.	<u>Main Teaching</u> Explain to the class that they will each be making their own moving picture that will be shared with younger children. Share a moving picture story book. For each page look at the scene and ask the following questions: 'What do you think will move in the picture? How will you make it move?' Show the children how the picture moves. What part of the picture moved? What does the moving part do? How does it work? What effect does it have? How well does it work? Start to encourage children to use the correct vocabulary such as lever, slider, pivot, push, pull, direction, up, down, left, right. <u>Differentiated Activities/Challenges</u> Each group will be given one moving book. They will explore the different pages in the book. They will then choose one page to focus on. They will answer the questions: What part of the picture moved? What does the moving part do? How does it work? What effect does it have? How well does it work? The children could write a few notes using the HA – Exploring Moving Books Activity Sheet (MA with support), LA/SEND T to write a speech bubble about children's answers. T to take photo to go with	Exploring Moving Books Activity Sheets, Optional use of Let's Explore powerpoint	slider, lever, pivot, slot, bridge/guide, card, masking tape, paper fastener, join, pull, push, up, down, straight, curve, forwards, backwards

			feedback for books. <u>Plenary</u> A member of each group should explain to the rest of the class which page of the picture book they chose and why. They should then explain their answers to the questions.		
Lesson 2	I can make and use a slider mechanism in my moving picture.	To design a purposeful, functional, appealing Gingerbread Man moving picture, based on design criteria. To explore and use a slider in their Gingerbread Man moving picture.	<u>Main Teaching</u> Explain that today they are going to turn part of the story into a moving picture. Talk through the powerpoint. T to model making a slider from the instructions so that the children can see. <u>Differentiated Activities/Challenges</u> Children work in pairs using the Gingerbread Man Slider Activity Sheet. They will use the background template. Children will need to decide which character they want to use to chase the Gingerbread Man. They will then follow the Slider Instructions Activity Sheet to make their slider. Check to see if children are measuring and cutting accurately. (T to take photo of process and end product for books) <u>Plenary</u> When the pairs have finished their pictures they will be asked to give a short feedback to the class about the movements achieved and quality of construction. Can they use and explain the term 'slider'?	Sliders Powerpoint, Gingerbread Man e-book, Gingerbread Man slider, Slider instructions, scissors, rulers, glue, camera	slider, lever, pivot, slot, bridge/guide, card, masking tape, paper fastener, join, pull, push, up, down, straight, curve, forwards, backwards
Lesson 3	I can make a lever and use it in my moving picture.	To design a purposeful, functional, appealing moving picture based on design criteria To explore and use a lever in their Jack and the Beanstalk	<u>Main Teaching</u> Explain that today they are going to turn part of the story into a moving picture. Talk through the powerpoint. T to model making a lever from the instructions so that the children can see. <u>Differentiated Activities/Challenges</u> Children will work in pairs using the Jack and the Beanstalk Lever Activity Sheet. They will use the background and cut around the template of Jack. They will then follow the Lever Instructions Activity Sheet to make their lever. Can children	Jack and the Beanstalk e-book, Jack and the Beanstalk Lever Activity Sheet, Jack and the Beanstalk powerpoint, scissors, split	slider, lever, pivot, slot, bridge/guide, card, masking tape, paper fastener, join, pull, push, up, down, straight, curve, forwards, backwards

		moving picture.	decide how long the lever needs to be? Can they put the pivot in a sensible place? Can they assemble the product independently? Can they change the product if it doesn't move how they want it to? <u>Plenary</u> Ask the children to share with a partner two top tips about making levers that would help children taking the lesson next year. Take feedback.	pins	
Lesson 4	I can design a working moving picture book.	To design a purposeful, functional and appealing moving picture.	<u>Main Teaching</u> Tell the children that they are going to design a moving picture based on the story of 'The Three Billy Goats Gruff'. Read the eBook. Talk through the powerpoint. Ask the children to work in groups of four to re-enact the story (this will allow children to familiarise themselves with the story and to start to think about how the characters move around). Which parts of the story could move? Which mechanism would you use? (A slider could be used to move the goat across the bridge, a lever to make the troll jump onto the bridge). Explain design criteria to children. Look at the design criteria for the product. Give the children time to discuss the criteria and then take feedback. <u>Differentiated Activities/Challenges</u> Demonstrate a good example of what an initial design should look like. Encourage the children to refer to the design criteria as they design. Children then complete the Designing a Moving Picture Activity Sheet. <u>Plenary</u> Children share their designs with the class. Encourage feedback from other children in the form of 'I can see that you followed the design criteria by...	'The Three Billy Goats Gruff' eBook, Designing a Moving Picture Activity Sheet.	Slider, lever, pivot, slot, bridge/guide, card, masking tape, paper fastener, join, pull, push, up, down, straight, curve, forwards, backwards
Lesson 5	I can make a moving picture	Generate, develop, model and communicate	<u>Main Teaching</u> Ask the children to do a 'five finger check' to see if they can remember what the moving picture will need to include when they make it this lesson (design criteria.) Take	Design sheets from last week, A3 sheets of	slider, lever, pivot, slot, bridge/guide, card, masking tape, paper fastener, join,

		their ideas through talking, drawing, templates and mock ups. To select and use a range of tools and equipment to make their moving picture. To explore how to make their moving picture stronger, stiffer and more stable. To use a mechanism (lever, slider) in their moving picture.	feedback and then show the design criteria. How will we make our moving picture neat? Discuss making it detailed, clear and colourful with neat cutting and colouring etc. What will make our picture well-made? Discuss making tidy holes and cuts in the correct places (mark with a pencil first) and securely attaching their mechanisms making sure they move correctly <u>Differentiated Activities/Challenges</u> With the whole class discuss what is to be done and how you expect the activity to be carried out. Children check they have the tools and equipment they listed last lesson. They will follow their designs to make their moving pictures. LA/SEND -Use ready cut pictures from the Billy Goats Gruff Cards Activity Sheet to support children when making their designs. Whilst the children are making, allow at least two short periods where the children are asked to stop and put their tools down. Is your picture following the design criteria? What improvements do you need to make? What are your next steps <u>Plenary</u> Children to look at their work and think about what they have left to do next week.	cartridge paper (or thick paper) ,Split pins, Scissors, Glue, Card strips, Coloured felt tips/pencils	pull, push, up, down, straight, curve, forwards, backwards
Lesson 6	I can make a moving picture. I can evaluate my moving picture	Generate, develop, model and communicate their ideas through talking, drawing, templates and mock ups. To select and use a range of tools and equipment to make their moving picture.	Children to continue making their designs from last week. T to support where needed. <u>Plenary</u> Children to complete Widget Self-Assessment sheet.	Design sheets, children's' creations, A3 sheets of cartridge paper (or thick paper) ,Split pins, Scissors, Glue, Card strips, Coloured felt tips/pencils	slider, lever, pivot, slot, bridge/guide, card, masking tape, paper fastener, join, pull, push, up, down, straight, curve, forwards, backwards

		To explore how to make their moving picture stronger, stiffer and more stable. To use a mechanism (lever, slider) in their moving picture. To evaluate their moving picture against their design criteria.			
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