

Key Stage 2	
Curriculum Subjects	Science Art & Design Literacy Mathematics - optional Space In The News Animation 
Learning Objectives	Create an animation flipbook using space as the theme
Materials	BIC® KIDS EVOLUTION™ Ecolutions® Colouring Pencils BIC® EVOLUTION™ Ecolutions® HB pencil The attached worksheets Scissors, plain paper and tape/glue 
Teacher Prep	
Print out worksheets 1 & 2. One set per child. Prepare research materials focusing on a recent space event. Get a YouTube clip ready of a rocket blasting off from Earth.	Pupil Prep
	Research a recent space event and write a short paragraph answering what happened and why. Read and cut out worksheets. Stick the boxes together, making sure number 1 is at the top and 24 at the bottom.
Lesson	
<p>Explain that animation is an illusion. It is made up of a series of pictures which flash one after the other at a frame rate of 24 frames per second. At the movies we see 24 pictures for every second of film on the screen. The worksheets contain 24 boxes, so in theory the flipbook animations should be 1 second long in duration.</p> <p>Class discussion - Screen the YouTube clip of a rocket taking off. Discuss what happens, paying particular interest in the fire and how it propels the rocket upwards. Using plain paper and BIC® EVOLUTION™ HB pencils, ask the pupils to draw a rocket blasting off. Encourage them to draw interesting shapes in the fire and smoke.</p> <p>Worksheet 1. Using boxes numbered 1 - 12 Ask the children to add colourful fire to the back of each rocket by drawing flames coming out of the exhaust. BIC® KIDS EVOLUTION™ colouring pencils work great for this! To keep the flames consistent try and copy the shape and style of the fire from the previous box. Bigger changes will look fast, smaller changes will appear smoother.</p> <p>Worksheet 2. Using boxes numbered 13 - 24 How will the animation end? Discuss what could happen next and ask the pupils to create a climatic or comedic ending. Keep the sequence going and remember that even though the rocket has disappeared, the flames may need to continue for a few more frames. Encourage the children to add new elements based on the research they did before the activity. The latter could be planets, satellites or even UFOs.</p> <p>Medium difficulty - Write a news article about the recent space event. It must include the names of the people involved and a reason why it has happened. Use the drawing of a rocket blasting off to accompany the report.</p>	
Learning Outcomes	Understand basic animation technique. Animation is made up of 24 frames per second. A hand written paragraph about a recent space event which is used to influence their animation. A hand drawn picture of a rocket blasting off. A hand drawn flipbook.
Follow on Activities	Add to the flipbook and continue the story using more boxes. Write a short story about the Astronaut in the rocket. Where is he/she going and why? Take a photo of each box and create a slide show with music. Write a letter to an Astronaut. What questions would you like to ask him/her?