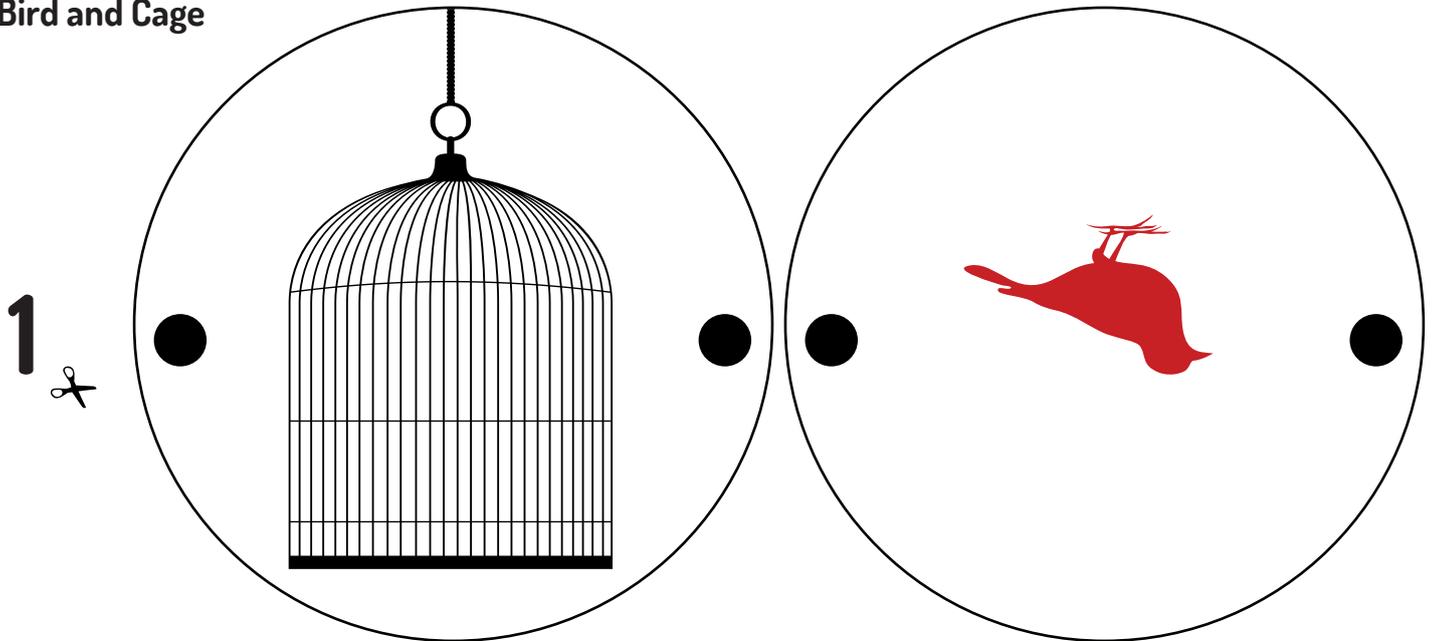


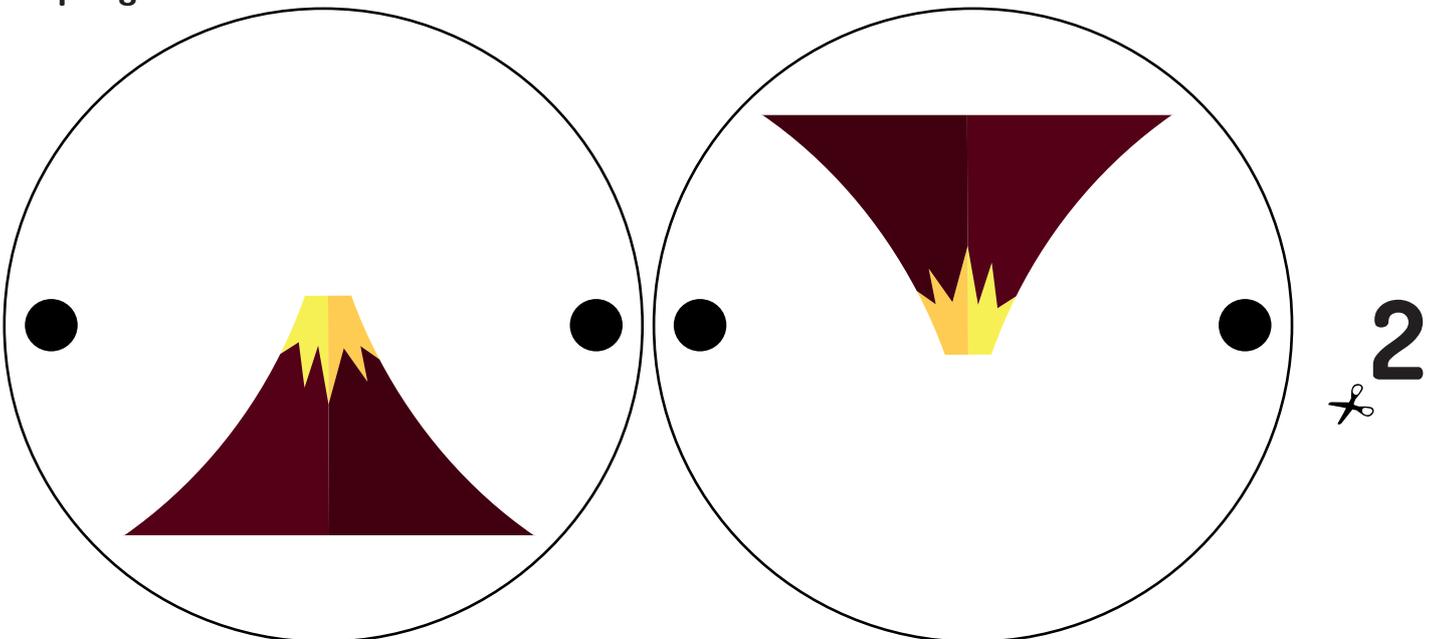
Key Stage 1 & 2	Created by InspirEd Workshops – Film & Animation Specialists. Book a workshop to support this lesson plan. www.inspiredworkshops.co.uk/bicschool	
Curriculum Subjects	Art & Design	Animation
	History	Film
	Science	
Learning Objectives	Make a Thaumatrope to demonstrate the persistence of vision principle.	
Materials	BIC KIDS EVOLUTION ecolutions colouring pencils The attached worksheets. Scissors & string	
	 	
	Teacher Prep	Pupil Prep
	Print out the worksheets on thick paper. Handout one each or one between two. This activity is useful to use as the starting point for an animation or film history module.	None needed
		
	Lesson	
	<p>A Thaumatrope is an optical toy invented in the 1820's by a London Physicist named Dr John A Paris. It works by tricking the mind into thinking it has seen one image instead of two. This is called persistence of vision, a principle where the eye retains an image for a short period after an object is gone. By twisting the Thaumatrope fast enough the illusion of motion is created. The Thaumatrope represented the start of the moving picture movement which includes the invention of the film camera and hand drawn animation.</p> <p>Task 1 - Worksheet Follow the instructions on the worksheet. 'Make' Worksheet - Please use this template if you would like to take the lesson further. Encourage the children to think of a more detailed illusion. Perhaps they could draw a game character jumping or a flower opening up it's petals.</p>	
Learning Outcomes	Understand the scientific term 'persistence of vision'. Create a working Thaumatrope.	
Follow on Activities	Make an animation showing 'persistence of vision' in action. Alternatively invite InspirEd Workshops into your school to run an animation session to support this lesson plan. Look at other optical toys like the Zoetrope and Praxinoscope. Make a Flipbook - See our Make an Intergalactic Flipbook lesson plan.	

1. Cut out both circles and stick together back to back. Make sure the bird is upside down. Pierce the holes and thread through two pieces of string. Pull the string tight and twist using your fingers. What happens to the bird?
2. Do the same as above but this time draw some lava erupting out of one of the volcanos. BIC KIDS EVOLUTION ecolutions colouring pencils are perfect for this activity.

Bird and Cage



Erupting Volcano



Advanced difficulty: What can you add to the volcano Thaumatrope to show the force of the lava? Will you need to add it to both sides?

Make A Thaumatrope



Draw something on each side of the Thaumatrope. Cut out the circles and stick them together back to back. One of the objects you have drawn must be placed upside down. Pierce the holes and insert two pieces of string. Pull the string tight and twist.

