Smoovie

Example Lesson Plan
Physics

Introduction

There are endless ways in which stop motion can be incorporated into the Physics classroom. Stop motion in a Physics lesson may not be something your pupils are expecting, but is guaranteed to create a buzz of excitement. From forces and motion to circuits and space, stop motion can be incorporated to increase your pupils' learning.

A simple and effective way of introducing stop motion animation into your Physics lesson for the first time would be through the topic of forces and motion.

Idea 1 - An Animation of Forces and Motion

1. Cover the topic in class.

2. For homework, ask the pupils to create notes of what they have learned in class. These notes will be used as reference for their stop motion animation.

3. Ask the pupils to bring in toy cars or anything similar they can use in their stop motion animation.

4. In the next lesson, split the class up into groups of two and three.

5. Provide each group with a scenario to animate from a list you have already made up. Each scenario will be the start of an action, and the pupils will have to animate the sequence and show what happens at the end. This will provide you with an easy way to consolidate and validate the information learned by the pupils.

6. Provide the pupils with coloured card, so they can create arrows depicting the direction of the forces.

7. Each scenario can be an individual scene, or they can run consecutively. Let the pupils decide what they would like to do.

The list on the next page gives suggestions for just some of the scenarios you can ask your pupils to animate. See if there are any others you can think of with them!

An Animation of Forces and Motion continued ...

Suggested scenarios:

1. What forces are in play when a car is at rest/stationary?

2. A moving car collides with another moving car. What happens?

3. A car is parked. Unfortunately, a moving car bumps into the stationary car. What happens?

4. A driver isn't paying attention and collides with a wall. What happens to the two objects?

After the pupils have finished animating the various scenarios, get them to present their findings to the class and provide reasons and evidence for their animation choices.

Idea 2 - Animate the Solar System

Learning about the Solar System can be really exciting. Lessons on the Solar System can be interactive, and stop motion animation is the perfect tool to help.

Pupils can create an animation of the solar system

1. Cover the topic in class.

2. Split the class into groups of 5 or 6, and ask each group to create an animation of the Solar System. You can create a set of criteria that they must include, for example they must include three facts on each planet etc.

3. Using the downloadable Smoovie Storyboards, Scripts and Set Designs, get the pupils to plan their animation. Remind them to include the criteria you have created.

4. After the planning process has been completed and each group's plan has been reviewed, ask the pupils to animate their ideas. Provide them with an array of materials to use within their animations. If you are feeling creative, you could get the pupils to make their planets out of papier-mâché.

5. Once completed, play the animations for the whole class. You can then evaluate what the pupils have learned.