

Year – all from ages 5 – 11 (Primary Age) Believing vs. Knowing – PART 1: Magic tricks, sensory information and beyond

# Root them in the problem:

Start the lesson with a statement, picture or clip introducing the problem they need to solve:

### https://www.youtube.com/watch?v=M4QxrvgaaoY

Watch the video clip until 1m47sec. and stop it.

Ask the group 'What just happened?'

Ask them to be specific about exactly what they just saw.

# Get them talking:

Pose some questions to the class, these should be simple but have the potential for many different answers:

Without playing the rest of the video ask them to see if they can reproduce the trick in some way or explain how it was done.

Now say you are going to perform your own magic trick. Screw up a piece of scrap paper and let it fall to the ground. Shout 'Ta da!' and ask them:

### What is the difference between the trick on the clip and the one I just did?

They might want to point out that your trick isn't a trick, it's just gravity. This is exactly where you want them to go! Talk about how they know what gravity is. Talk about the times they have seen gravity at work. Then bring it back to the clip – say something like 'you just saw him put pencils through a balloon!' just like you have seen gravity.

#### Start the debate:

Pose a controversial solution to any problems arising in the previous section:

Ask the group:

## Can you always trust your senses?

Discuss gravity and its effects and then talk about the trick in the clip. Both come from sensory information but one is held up as a trick and the other is scientific fact. How do you know the difference?



# Final Section:

Step outside the argument and look at it critically. Ask the class/group to summarise their points of view and ask if they are truly justified.

Watch the rest of the clip which demonstrates how the trick was done. Talk about how they were fooled. They may have worked it out themselves earlier and so ask them how they knew? What is it about humans that makes us understand things that then become 'truths' in our minds like gravity or colours?

Ask the group:

What is the difference between Knowing and believing? Do scientists know everything or do they need some kind of belief in their theories before they can go out and prove them?

# **Teaching:**

Link this to any in depth exploration of the subjects covered with some direct teaching. Look at the type of thought or school of thought you are exploring. What would a philosopher/theologian/believer/thinker say about the argument we've just explored?

Explore the themes in this clip:

https://www.youtube.com/watch?v=9W3RsaWuCuE

It covers a range of things that scientists are looking into but which cannot be seen – like dark matter!

What is it that humans (scientists) use to understand the world when our senses fail?