

Spinema

<https://www.rigb.org/families/experimental/spinema>

We're all used to seeing films and animations. This activity is all about understanding a bit more about how these work, and why our brains perceive what is actually a series of still images as flowing motion.

Click this link to see vintage images from the early days of animation <https://ri-science.tumblr.com/search/muybridge>

By making a thaumatrope, you can learn about 'persistence of vision', as two images pass by your eyes so quickly that you are still processing one when you see the next, so your brain merges the two together to see a complete image.

A phenakistoscope works just like classic animation and movies. By rapidly showing one image after the other, each slightly different to the one before, a sense of movement is created. This known as 'beta movement', and is the basis of any moving image you see on a screen.

The activity

- Make a thaumatrope and a phenakistoscope – **templates are available to download or you can draw your own.**
- ExpeRiment with animation.
- Learn how we process images and motion.

https://www.rigb.org/docs/spinema_infosheet_0.pdf

Questions to ask children

Before the activity: What types of cartoon/animation do you know? How do they make drawings or models seem to move?

After the activity: What differences are there in the images? What would happen if we spun the disc in the opposite direction? What if we spun them faster/slower? What would happen if the phenakistoscope had more/less drawings?

Going further

Try making a flip book. You can see how at rigb.org/ExpeRimental.