#### Year 5 & 6 Science: Home Learning Week 13

Hello Year 5 & 6, this week our focus is on light. There are no BBC Bitesize science lessons this week or next week but I've still put some activities together for you to complete. You should try to do tasks 1 & 2 if you can, the rest, including the practical activity, are optional.

As always, remember to get permission from an adult before doing any practical activities and clean up after yourself when you're finished!

Take care & stay safe

Miss Johnston 😳

Task	Description
1	Visit BBC Bitesize and watch this video about light and light sources: <u>https://www.bbc.co.uk/bitesize/clips/zg6r82p</u>
2	List three natural sources of light and three artificial (man-made) sources of light.
3	<ul> <li>a) Draw circles round all the things in the picture that are light sources.</li> <li>b) Draw a narrow to show how the girl can see the TV picture.</li> </ul>
	c) Draw an arrow to show how the boy with the toy can see the fire.
4	What do the following words mean (use a dictionary to find out if you're not sure): a) Transparent b) Translucent c) Opaque d) Reflect
5	OPTIONAL PRACTICAL ACTIVITY: Make oobleck

# Making Oobleck Slime

### Why do this?

Fancy making a weird slimy concoction that acts like a liquid but behaves like a solid when you hit it? Most liquids behave in a predictable manner, but non Newtonian liquids like oobleck slime do not stick to the rules and acts in a very curious way, crossing the boundaries between solids and liquids.

### Safety

- This activity is hands-on and rather messy, so make sure you're not wearing your best clothes!
- When you've finished, do not pour the slime down the sink as this could clog the pipes, instead spoon the mixture into a zip-lock bag, fasten it tightly and dispose of it in a bin.
- Don't eat the slime, it won't taste very nice and could be full of bacteria if you've put your hands in it.

### **Equipment & materials**

- Large mixing bowl
- Measuring jug
- Cornflour

- Water
- Spoon
- Clear re-sealable storage bag

# Method

To make the oobleck:

- 1. Place some cornflour into a large mixing bowl
- 2. Little by little, add water and use your hands to mix it into the cornflour.
- 3. Keep mixing until the cornflour and water have blended together and the slime is the consistency of thick honey.

Once you've made your slime, try out a few experiments to see how your slime reacts. Do you think your slime is a liquid or a solid? Why not try the following? Test out:

- Punching the slime and drawing back your hand quickly
- Scooping some of the slime into your hand and rolling it into a ball between your palms
- Leaving your slime out over a few days/overnight and seeing if you can you make it slimy again once it has dried out
- Spooning some of the slime into a re-sealable storage bag until its two-thirds full, and then gently pushing a delicate object (e.g. a biscuit) into the mixture. Then try dropping the bag from a tall height (around 2m) and see how high you can you drop it from before the object breaks

### **Expected observations and results**

You should find that oobleck behaves like a liquid when handled gently, but like a solid if handled forcefully. This is because the cornflour doesn't actually dissolve into the water, so the oobleck is a mixture of water particles and the very small cornflour particles. The mixture binds together tightly under stress.

### **Background notes**

• Make sure you add the water slowly and carefully otherwise the cornflour might clump together or the mixture could be too runny.