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| **Topic** | Forces | **Level** | Key Stage 3 and GCSE |
| **Outcomes** | 1. To think deeply about forces | | |

**So you think you understand forces?**

With your partner discuss the questions below. As you answer each question write down your ideas onto a mind-map. Each person should use a different colour pen so that you can see each other’s thinking.

1. A cannon ball and a paper clip are dropped from identical heights. Which will hit the ground first?
2. Forces cannot be balanced if an object is moving. True or false?
3. You throw a ball across the room. Draw a diagram of the ball once it has left your hand and label the forces.
4. True or false, there is no gravity on the moon?



1. Imagine that a boat is floating in a swimming pool. The heavy steel anchor is thrown overboard. Would the level of the pool water increase, decrease or stay the same?
2. You are driving along in a car with a Helium balloon in the back. You break suddenly. What will happen to the Helium balloon? Will it move forwards, backwards or stay in the same position?