

Science 8th June

I hope you've tried making either a sundial or one of the 1 minute timers from last week. This week we're continuing to look at time and we're going to find out just how quickly we can react.

When we're doing something important like driving we need to concentrate so that if something unexpected happens we can react quickly.

There are laws about things you can't do when you're driving because if you're distracted your reaction time gets longer.

We're going to do an experiment to find out about reaction times.

The experiment works like this <https://www.youtube.com/watch?v=Ep9Xg5Ce63o> and there's more information for whoever is helping you in the parents' information sheet.

Experiment 1

Who has the fastest reactions in your house?

Does age matter?

Try the experiment with as many people in your house as you can. Let everyone have 3 goes – there's a sheet you can use for your results and a chart to let you work out the reaction time.

Who has the quickest reaction time?

Experiment 2

What happens when you're distracted?

Drivers can be distracted by many things – using a mobile phone, talking, eating or drinking are common distractions.

So try the experiment again with some of these distractions- so while they're doing the test

Talk to the person

Let them send a text or play a game on their phone

Let them eat or drink

and see how much difference it makes to their reactions!

At 70 mph a car travels more than 10 metres in 0.5 seconds.

So are your reactions faster than an F1 driver's

So how do your reactions compare to a racing driver's?

<https://www.youtube.com/watch?v=6fgGJ-M6X2s>

The app used in the video is called GP Start - for Apple or Android – or you can use <https://f1-start.glitch.me/> - to see if your reactions are better!