

Time Estimation

Teacher's notes

Aim

To estimate lengths of time and consider how other factors can affect results.

Objective

This experiment gives pupils a chance to have a go at estimating times of up to 10 seconds by observing the length of time a black circle appears for.

Carrying out the investigation

Click on the experiment icon to start.

Login to the on line experiment by entering the LEA and school code. (These are available from your school or can be requested from us.) **'Submit'**. **'Next'**.

Pupils are asked to enter some details about themselves. **'Next'**.

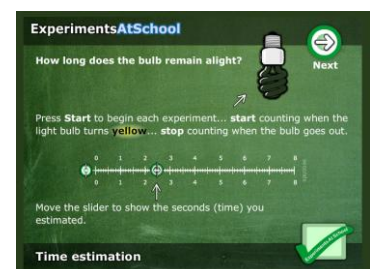
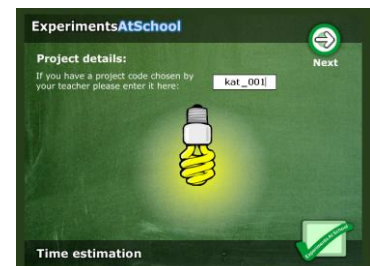
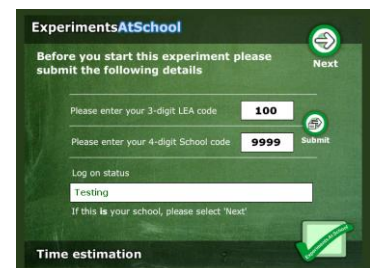
It is a good idea to give pupils a project code. This will enable you to retrieve your pupils' data.

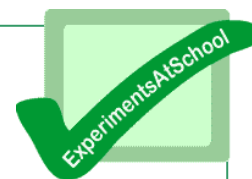
Clicking on **'Next'** will take you to the instructions to start the experiment.

Pupils are then asked to estimate the length of time a light is on to the nearest hundredth of a second.

They will do this 5 times and then be presented with their results.

Clicking on **'Submit'** will complete the experiment.

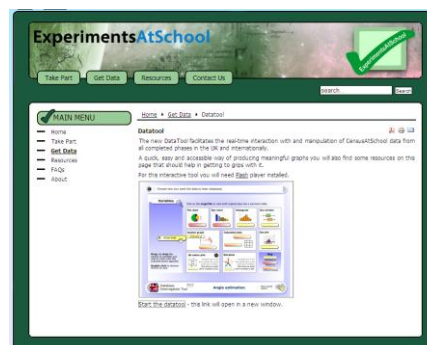




Time Estimation

After finishing the experiment pupils can use the Data Interrogation Tool to analyse random samples of data from all schools who have taken part in this experiment.

From the home page of ExperimentsAtSchool click on 'Get Data' 'Data Tool' 'Start the Data Tool'.



Click on the '**ExperimentsAtSchool**' icon.

Also see *ExperimentsAtSchool* Data Tool worksheet in Resources.

Possible Investigations

How good are you at guessing lengths of time without any help from clocks or watches?

Pupils try out the online experiment.

Do you get better at estimating time with practice?

Pupils can try an increasing number of attempts and compare the resulting data.

Are older people better at estimating time?

Try the experiment out on a range of participants of differing ages.

Can girls estimate time better than boys?

Compare results from girls and boys.

Results

The results from each individual experiment will be displayed in a table like the one opposite.

Age	15
Gender	f
Writing hand	r
Guess 1 (s)	6.40
Guess 2 (s)	0.60
Guess 3 (s)	8.00
Guess 4 (s)	4.60
Guess 5 (s)	3.20
Actual 1 (s)	5.26
Actual 2 (s)	0.74
Actual 3 (s)	7.11
Actual 4 (s)	3.92
Actual 5 (s)	2.52