



Dear Parents and Carers, January 2017

Your child has been given this letter because their school is taking part in a science fair competition organised by Longhill High School in Rottingdean and the University of Sussex.

Science fairs are very popular in the United States but not so common in this country. We think they are a great opportunity for children to investigate something they are interested in.

To enter a project in the science fair children should carry out an investigation and then present their findings in the form of a single sided poster. The poster should be given to your child's class teacher who will submit the best to be put on display at Longhill High School. Prizes will be awarded for the best posters.

Please find attached a list of ideas that your child might use for their science fair project and an example of what the finished poster might look like. We know how busy family life can be so please help your child to select an idea that you are happy with them undertaking.

We have offered a range of suggestions from surveys that need no equipment or resources, experiments with things you probably have around the home or fieldwork that might need a trip to the beach, park or woods. A project based on a simple survey can be just as successful as a project with more complex experiment. Judges will be looking for a well-designed investigation that answers a clear question with results that are clearly presented and well explained. It can be handwritten, typed or a combination of the two.

Parents are reminded that household cleaning products such as bleach and oven cleaner can be very harmful and mixing cleaning products can produce dangerous gases. **Experiments involving cleaning products are not permitted.** 

The posters will be put on display at Longhill High School on Saturday 25th February and you are welcome to come and see them and help us pick the best. On this day there will also be a number of practical workshops taking place for year 4 to 6 children. For more details please register your interest by completing the short form <a href="http://rebrand.ly/SciFair">http://rebrand.ly/SciFair</a>

For more ideas, examples and a list of rules, please visit our website www.longhill.org.uk/Science

Yours Faithfully,

Donald Das

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## Science Fair Ideas

Here are some ideas that you might use for you science fair project. They are just ideas – try to make up your own question. You could also search for science fair projects on YouTube, Google or look at www.all-science-fair-projects.com.

#### **Biology (Animals, Plants and the Environment)**

What cat food does my cat prefer?

Do old people prefer different chocolate bars to young people?

Does more expensive chocolate taste better?

How far can a snail travel in a night?

Where is the best place to find woodlice?

What kind of food do wild birds prefer?

What is the most popular flavour of crisps?

Where is the best place to ripen bananas?

Do low fat foods really contain less fat?

Where is the best place to sprout cress?

Where is the best place to find four leaf clovers?

Do limpets move along a rock at high tide?

What is the best way to learn times tables?

Does music help you concentrate?

What Insect from the garden is the most aggressive? (Insect fight club)

#### Chemistry

Do Mentos make all types of cola fizz?

What stains does your washing machine remove?

What foods make baking powder fizz?

What coins make the best battery?

What metals can coke dissolve?

What drink dissolves teeth the fastest?

What surfaces does Selotape stick best to?

Do glow sticks last longer in the fridge?

What year did 2ps become magnetic?

Does seawater make nails rust faster than rain water?

How can you stop a bike chain going rusty?

### **Physics (Electricity, Gravity)**

What part of a football should you kick to make it go the furthest?

Can you throw light or heavy balls the furthest?

Does toast fall butter side down more often?

Which type of battery lasts the longest?

Is it quicker to run up a hill or ride a bike?

Does the lead in a pencil really break when you drop it on the floor?

What day of the week do you use the most electricity in your house?

How can you make a stronger electromagnet?

Does a torch last longer if it is left on in a fridge?

### Earth Science (Rocks, Weather and Space)

Where is the best place to find pebbles with holes in on the beach?

Does it rain more at the weekend?

Where is the best place to spot planets at night?

Is it warmer on cloudy nights?

Does a full moon affect the tides?

Where is the best place to find fossils on the beach?

Where can I find micrometeorites?

What speed should you drive to save the most fuel?

#### What next

- 1) Write out the question you want to answer
- 2) Plan your investigation on the planning form and show it to your science teacher
- 3) Carry out your investigation

- 4) Make a poster to show what you have found out (make sure you include your Name and Class/Teacher on the poster so we know who you are)
- 5) Bring the poster into school

# **Science Fair Planning Form**

What question are you going to investigate (pick one from the list or make up your own)?
What equipment or materials will you need?
What will you do to find the answer to this question?
Try to draw what your blank table of results will look like
I am happy for my child to carry out this project
Parent/guardian signature