



Year 6 Science Fair

Friday 18th September, 2020

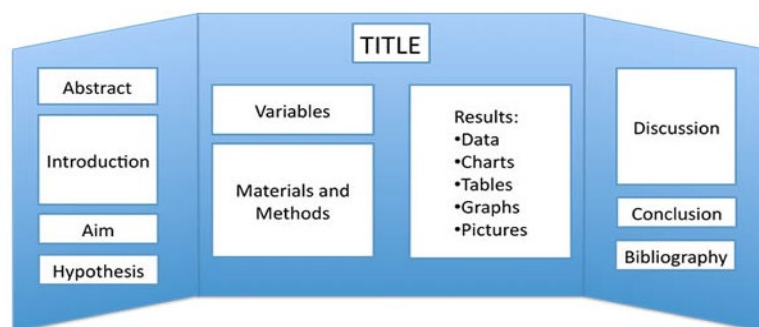
Dear Parents/Caregivers,

From this term, students in Year 6 will be working on a science project that they will be displaying at our school Science Fair during Week 6 in Term 4. The Science Fair will be held in the school hall. Due to COVID restrictions we may unfortunately be unable to have parent attendance this year, or even student groups from different grades mix. So that Year 6 can still host their Science Fair, students will be recorded discussing their projects and this will be available for parents and other students to watch. If we are able to have visitors in Term 4, we will let you know. Please keep up to date with any changes via Facebook and our school newsletter.

The Science Fair Project is a project that students are to engage in either individually or in pairs. Year 6 teachers and I will help to guide students through the process of developing their research project. This will take a degree of dedication and organisation from your child, as they will be required to listen carefully to instructions and guidelines during class lessons and apply these when working on the project at home. We will be offering as much guidance as your child requires for this task, as well as, delivering weekly lessons that focus on the scientific method. This project has been designed for students to learn valuable skills in preparation for high school such as:

- Understanding the scientific process, including: aim, hypothesis, research and communicating results;
- Understanding controls, independent and dependent variables;
- Time management and organisational skills;
- Goal setting;
- Collecting and sharing references; and
- Creativity.

The task will require students to choose a question which they will answer scientifically. Attached to this note is a list of ideas to get your child thinking. It is encouraged that they choose a topic of personal interest. In the coming weeks, after we have introduced the project at school, I will send home the complete set of guidelines for the task.



Yours sincerely,
Ben Kirk
Science Fair Coordinator

Science Fair Ideas

Here is a list of ideas to get you started when deciding on a topic. It is important to pick something that interests you. Remember that you are looking for a question to use that will allow you to: *make a prediction, carry out experiments and report findings.*

Make sure you will have access to all of the materials you need and that you have your parent's permission to complete the chosen task. Feel free to choose a question below or choose an area of interest to you.

- Does music have an impact on animal behaviour?
- Does the colour of food or drinks affect whether or not we like them?
- Does music have an impact on plant growth?
- Which paper towel brand is the strongest?
- What is the best way to keep an ice cube from melting?
- What level of salt works best to hatch sea monkeys?
- Can the food we eat affect our heart rate?
- Can background noise levels affect how well we concentrate?
- What is the best way to keep cut flowers fresh the longest?
- Does the colour of light used on plants affect how well they grow?
- What plant fertilizer works best?
- Does the colour of a room affect human behaviour?
- Do athletic students have better lung capacity?
- What brand of battery lasts the longest?
- Does the type of potting soil used in planting affect how fast the plant grows?
- What type of food allows mould to grow the fastest?
- Does having worms in soil help plants grow faster?
- Can plants grow in pots if they are sideways or upside down?
- Does the colour of hair affect how much static electricity it can carry? (*test with balloons*)
- How much weight can the surface tension of water hold?
- Can some people really read someone else's thoughts?
- Which soda decays fallen out teeth the most?
- What light brightness makes plants grow the best?
- Does the colour of birdseed affect how much birds will eat it?
- Do natural or chemical fertilizers work best?
- Can mice learn? (you can pick any animal)
- Can people tell artificial smells from real ones?
- What brands of bubble gum produce the biggest bubbles?
- Does age affect human reaction times?
- What is the effect of salt on the boiling temperature of water?
- Does shoe design really affect an athlete's jumping height or running speed?
- What type of grass seed grows the fastest?
- Can animals see in the dark better than humans?
- Which battery brand is best?
- How does air pressure affect how high a ball bounces?
- Which paper airplane designs are the best?
- Is audio or visual information better remembered
- Which gender or age have the best memory?
- What effect does eye colour have on the ability to distinguish between colours in low light?
- Determine if a person's reading comprehension is greater when reading written material on paper or from a computer screen.
- Can people really taste the difference between fat free and regular foods? Does age, gender, or other factors affect the ability to taste the difference if there is one?
- Which of the three senses (sight, hearing, or touch) produces the quickest reactions in humans?



- Determine if males and females have different abilities in estimating an object's size.
- Determine if smells, odours or scents affect peoples' mood. If so, how?
- Do TV stations increase the volume of advertisements in order to get your attention and influence your buying habits?
- Can a person recognise the gender of another person from pictures of bare feet?
- Do your fears change with age?
- Does music change concentration?
- Effects of weather on human emotions?
- Do babies prefer a familiar or unfamiliar toy?
- Does the level of noise affect eye-hand coordination?
- Does a blindfolded person walk in a circle? If so then why?
- Audio memory vs. visual memory.
- How do different types of fertilizers affect plant growth?
- Comparing types of artificial light on plant growth.
- The effect of excess salinity on plants.
- The effects of salts on the freezing point of water and other liquids.
- Can you obtain water from ink, vinegar, milk?
- Does a person's body temperature vary during the day?
- How accurately can people judge room temperature?
- Does a person's pulse rate vary during the day?
- Following strenuous exercise, does pulse rate stabilise faster in athletes than in non-athletes?
- Does playing video games affect heart rate?
- Do males have a larger visual blind spot than females?
- Is the same point on human skin equally sensitive to heat, cold, pain, etc., or do different points feel different sensations?
- Is there a relationship between taste and smell? If yes, what is it? How do you know?
- Which kind of bread grows mould the fastest?
- What is the effect of light and temperature on bread mould?
- Which surfboard wax grips best?
- Does cold or heat affect how high a ball bounces?
- What are the reactions of worms to various surfaces?
- How fast is a snail's pace on various surfaces?
- Does room temperature have any effect on ant populations?
- What are the effects of light and darkness on ants?
- Is colour a factor in attracting various types of insects?
- How does temperature affect the growth of tadpoles?

Bring this page back to your teacher when you have chosen a few possible questions that you may want to answer.

Name: _____ Class: _____

Choose a Problem

These are problems I am interested in.....

1. _____
2. _____
3. _____

Your teacher will approve one of your 3 ideas and write it below.

My approved problem is.....

Things I will need to research...

1. _____
2. _____
3. _____
4. _____

How I might experiment.....

