Issue 01, November 10th

OPA Science

Science at Home

As it is World Science Day, the children had an assembly and were shown an activity that they might like to try at home. We hope you enjoy the activity and have fun discussing them with your adults. Please share your pictures on twitter with the hashtag #OPALGScience - we would love to see them!

For this activity you only need a few things.

10 raisins

Lemonade (one just opened if possible)

Clear glass

1. Get a clear glass and fill it nearly to the top with lemonade.
2. Separate the raisins.
3. Add the raisins one at a time to the glass of lemonade.
4. Wait and see what happens!

How does it work?

First the raisins sink to the bottom as they are heavy. Then the carbon dioxide bubbles in the lemonade attach to the rough surface of the raisins. When a raisins have enough bubbles attached the raisin becomes lighter and floats to the top. Once the bubbles pop at the top of the surface the raisin becomes heavy again and sinks to the bottom. This is why this investigation is called dancing raisins!

World Science Day

Celebrated every 10th November, World Science Day for Peace and Development, highlights the important role of science in society and the need to engage the wider public in debates on emerging scientific issues. It also underlines the importance and relevance of science in our daily lives.

By linking science more closely with society, World Science Day for Peace and Development, aims to ensure that citizens are kept informed of developments in science. It also underscores the role scientists play in broadening our understanding of the remarkable, fragile planet we call home and in making our societies more sustainable.

Issue 02, December 7th

OPA Science

Science at Home

Each half term, we will be sending home a science activity for the children to try at home. These activities will use materials which you are likely to already have. We hope you enjoy the activities that will be sent out and have fun discussing them together. Please share your pictures on twitter with the hashtag #OPALGScience - we would love to see them!

The first activity we would like you to try is Christmas themed!

1. Add about 1 tablespoon (15 ml) of lemon juice to the cup. Fresh squeezed or bottled juice will work just fine.
2. Soak an end of the cotton swab or put the paint brush into the lemon juice. You'll use this to write your message. This message can be Christmas themed.
3. Write your message on the plain paper. You'll be able to see it as long as the paper is wet so let the lemon-juice message dry completely.
4. There's no rush to revealing the message but when it comes time to read it, there are several methods of heat sources. **NOTE:** Make sure an adult helps out.

Here are some options:

- You can hold the paper over an incandescent light bulb with OK results. It may be hard to tell if the bulb is hot enough, so you may not know whether your paper is blank or whether you just can't see the message yet.
- You can "iron" your paper but don't use the steam setting. This may be the best method. A clean rag between the iron and the paper helps keep the iron's hot surface clean.

How does it work?

Most invisible ink messages can be revealed by heating either side of the paper. The message discolours before the rest of the paper gets hot enough to do so.