

English:

This week, we are going to do some of the activities from Pobble 365 which you will be familiar with from using in class. We are going to use the same picture all week so each day's activity will be linked to the following picture...



Monday:

Story starter!

Hours and hours had passed, and she hadn't seen a soul. The monotony of trudging through this seemingly never-ending labyrinth was tiring, and her eyelids felt heavy. The heady scent of the pine sap and earthy moss added to her lethargic state. She felt as if she could close her eyes and sleep for a thousand years. She knew she couldn't though; being trapped in the woods when night fell wouldn't be a wise move. Making the most of the remaining daylight would be crucial, she knew.

A great sense of foreboding filled her, and she had a tight feeling in her chest. The trees around her, like sentinels protecting the gods of the forest, seemed to bear down upon her. The dense army of pine trees threatened her from every side. There was only one path forward, and she took it hesitantly, not knowing what awaited her in the distance...

Write the next two paragraphs to add to this story starter.

Tuesday:

Question time!

What does the fact that she is 'trudging' through the forest tell you about how she is feeling?

What does 'lethargic' mean?

Why would 'making the most of the remaining daylight' be crucial?

Why are the trees compared to sentinels?

What might happen in the forest when night falls? What is she so afraid of?

Who might 'she' be?

Have you ever been lost? What does it feel like?

Wednesday:

Sentence challenge!

Can you add adverbs to my sentences below to make them better?

The girl was frightened. _____, she looked around at the surrounding forest. She began to walk _____ along the path, pausing _____ to take a sip of water from her canteen.

From the distance ahead, she heard a scream. The sound echoed _____ through the forest.

Go back to your story from Monday's work and add adverbs in to your writing with a different coloured pen.

Thursday:

Perfect picture!

Can you draw 5 things you would like to have with you if you were lost in a forest in the middle of nowhere?

You could then explain why each item might be valuable.

Friday:

Sick sentences!

These sentences are 'sick' and need help to get better. Can you help?

The girl was in a forest. It was a bit scary. The trees were big and tall she couldn't see much sky

She started to walk along the path?

Read through your story and edit it to ensure there are no 'sick sentences' in your work. Don't forget to upload your final, edited piece of work.

Spellings:

deflate

deform

decode

decompose

defuse

recycle

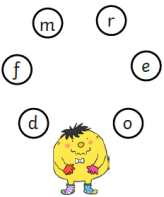
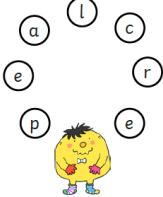
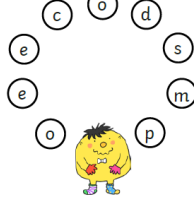
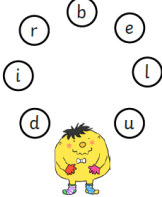
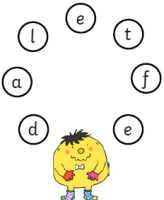
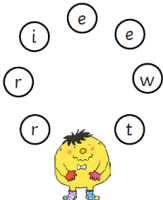
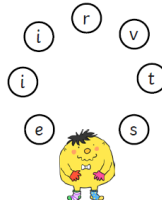
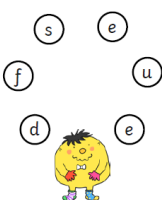
rebuild

rewrite

replace

revisit

Clumsy Mr Whoops has been juggling with this week's re- and de- verb prefix words and he's got in a real juggling muddle! Could you help him to unjumble each word using the clues to help?

<p>To bend or squash something until it is no longer recognisable.</p>  <p>_____</p>	<p>To fill the place of someone or something with somebody or something else.</p>  <p>_____</p>	<p>To rot or break down into pieces.</p>  <p>_____</p>	<p>To construct a building again.</p>  <p>_____</p>
<p>To let the air out of something.</p>  <p>_____</p>	<p>To redraft a text.</p>  <p>_____</p>	<p>To go back to somewhere you have been before.</p>  <p>_____</p>	<p>To make a bomb harmless.</p>  <p>_____</p>

Challenge Task

Which two spelling words hasn't Mr Whoops muddled up? Could you use each of them in separate sentences that contain plural possessive apostrophes.

WOW: Your 'word of the week' this week is **persecute**. Use it in a sentence and show which word class it belongs to.

Maths:

We have some different activities for you to have a go at this week. Please continue following BBC Bitesize or White Rose if this is what you prefer- or have a go at both! Keep up the work on Times Table Rockstars- you're all doing great!

Monday:

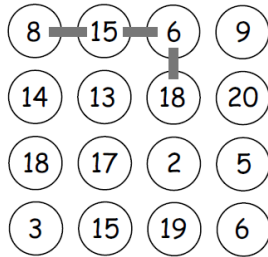
Joins

Join any four numbers.

Find their total.

Joins can go up, down or sideways, but not diagonally.

The score shown is $8 + 15 + 6 + 18 = 47$.



Find the highest possible score.

Find the lowest possible score.

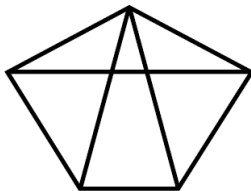
Try joining five numbers.

Now try joining five numbers using only diagonal joins.

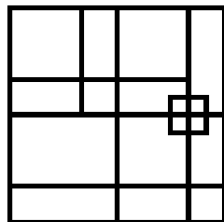
Tuesday:

Spot the shapes 2

1. How many triangles can you count?



2. How many squares can you count?



3. Draw your own diagram to count triangles.
Don't use too many lines!
How many triangles can a friend find?
Can you find more?

Challenge:

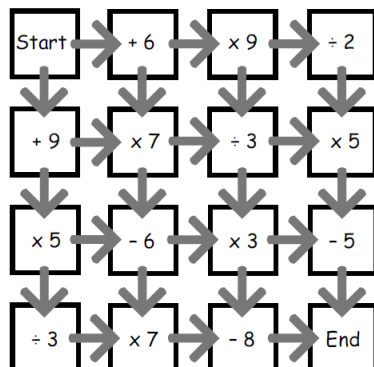
1. Name the types of triangles that you find and give a simple definition of the triangle's properties.
2. What is the difference between a square and a rectangle?

Wednesday:

Maze

Start with zero.

Find a route from 'Start' to 'End' that totals 100 exactly.



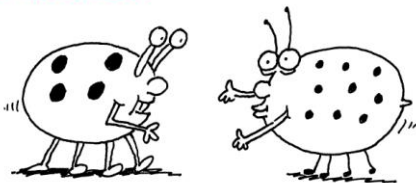
Which route has the highest total?

Which has the lowest total?

Now try some different starting numbers.

Thursday:

Zids and Zods



Zids have 4 spots.

Zods have 9 spots.

Altogether some Zids and Zods have 48 spots.

How many Zids are there?

How many Zods?

What if Zids have 5 spots, Zods have 7 spots,
and there are 140 spots altogether?

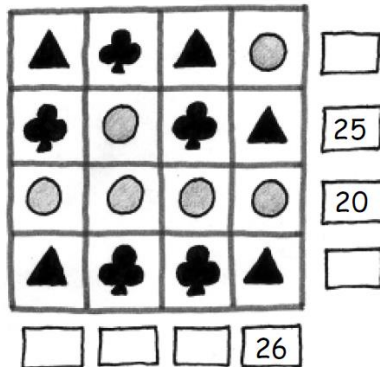
Find as many solutions as you can.

Friday:

Shape puzzle

Each shape stands for a number.

The numbers shown are the totals of the line of four numbers in the row or column.



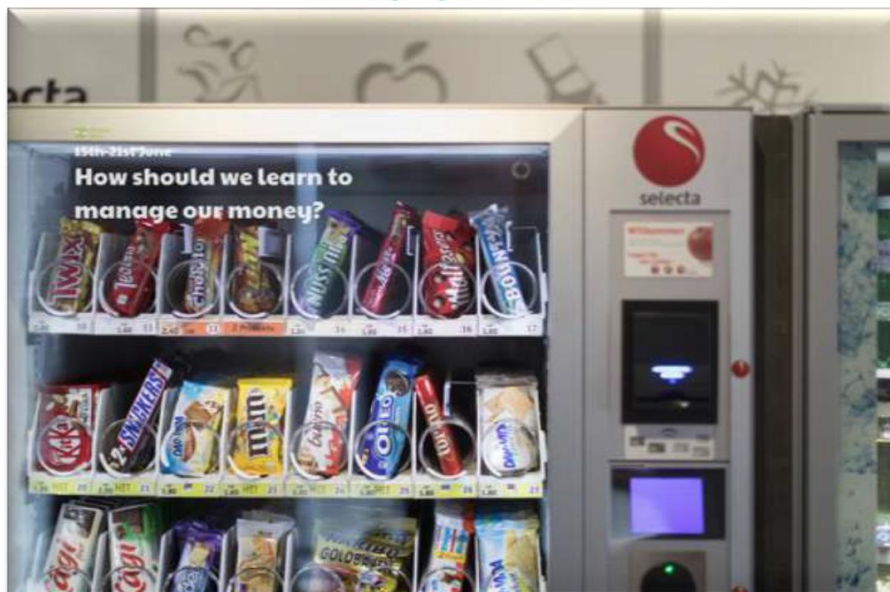
Find the remaining totals.

Challenge:

Design your own shape puzzle for a family member to have a go at. Send it over and we will have a go too!

Picture News:

15th June 2020
What's going on this week?



A mother from Northumberland recently spent £100 on a second-hand vending machine to provide an opportunity for her children to learn about money after tiring of them arguing over snacks and other items during lockdown. Mother of four, Sarah Balsdon, was getting so fed up with her children's constant arguments she and her husband, Kyle, came up with the idea to provide them in a limited and controlled way, whilst helping the children learn how to manage money.

Things to talk about at home...

- Have you received pocket money before, or do you receive it now?
- Do you think the idea of getting pocket money is a good one? Why?
- What age do you think children should start receiving pocket money?
- Can you think of other ways that you can learn about money?

Look at the graph showing the average value of pocket money per week in the UK, found on resource 2. How much does the average 12-year-old receive? What is the age of the children who receive an average pocket money of £4.60 per week? Which age receives the most/least? How much more does a 13-year-old receive than a 5-year-old? What coins could you use to pay a 6-year-old the average weekly pocket money?

Imagine you are allowed to choose one thing to buy. You can have anything you would like, and it doesn't matter how much it costs. Draw a picture and write a description of your item.



Each country has its own currency. This is the system of money it uses. The currency used in the UK is called pound sterling. Find out the currency used in other countries of the world. Locate the countries on a world map.

Use a magnet (you may have one on your fridge at home) to find out which coins are magnetic, and which are not. Use the website link to find out why some are, and some are not! www.fun-science.org.uk/magnetic-coins-science-experiment

Design and make a money box or a purse to look after your money!

Find out about coins and notes used in the UK in the past. Does anyone in your family remember coins changing and new ones being introduced? What is a shilling?



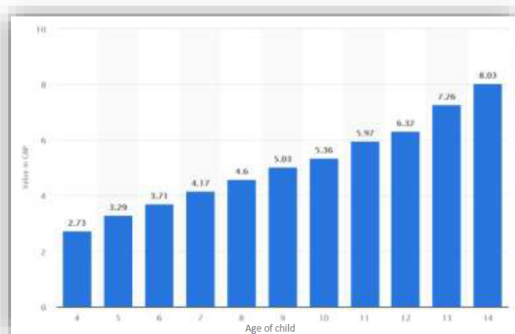
Resource 2

Look at the resource below, which provides more information about pocket money.

Pocket Money

Pocket money is a small amount of money, usually given weekly to children.

Average value of pocket money per week in the UK



Source: www.statista.com/statistics/1006191/average-value-of-pocket-money-in-the-uk-by-age

Do you receive pocket money or know anyone who does?

Reasons for pocket money

- Develop independence so children are not relying on adults for all of their money.
- Learn how to save money to buy something more expensive.
- Learn how to manage money. Once it has gone, it has gone!
- Gives children opportunity to make mistakes with money e.g. buying something that is cheaper in a different shop or something that isn't used.
- Prevents children from becoming greedy or demanding. They have their own money so need to save for items not just ask parents.

Reasons against pocket money

- Children don't learn to earn money as they are just given it.
- There is more chance children will misuse, waste and make mistakes with their money as they know they will just be given more.
- It becomes expensive to give children pocket money every week.
- Children will learn to expect money from their parents rather than getting a job.

What do you think? Should young people receive pocket money?

Science:

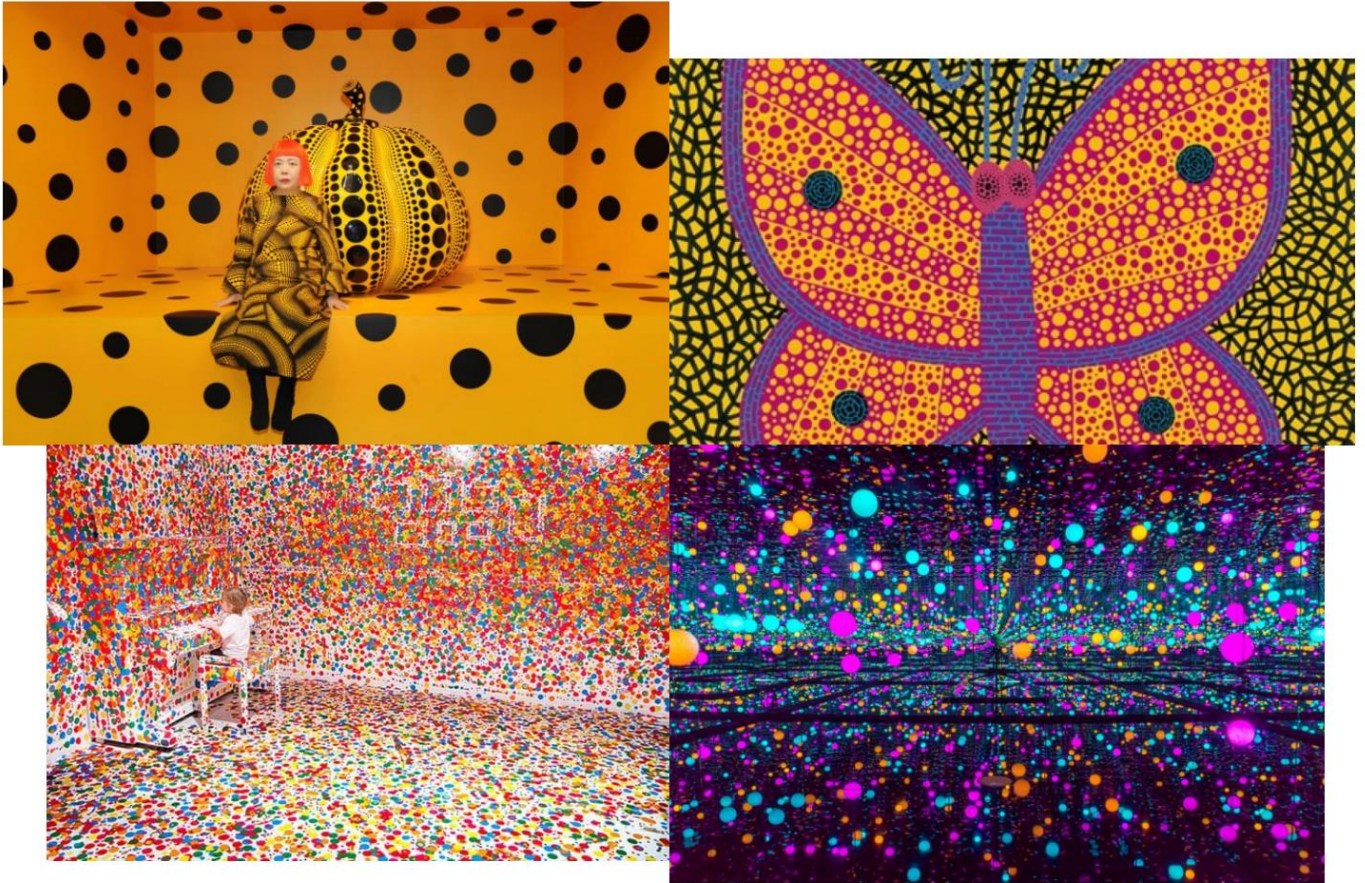
We recommend that you do this activity outside. You can use dirt or sand for making a great volcano and avoid making a mess at home. You can easily make it indoors if you choose so, but make it on some easily cleanable surface.

- Dirt or Playdough
- Little plastic bottle
- Baking soda
- Vinegar
- Dishwashing liquid
- Bonus: Food colouring

INSTRUCTIONS FOR BUILDING A HOMEMADE VOLCANO

1. Cut the bottle with scissors or knife and take just the bottom part, which we will use in the rest of the experiment.
2. Shape playdough or dirt around that bottle so it resembles a volcano. Here you can find out [how to make a homemade playdough](#).
3. Put a few spoons of baking soda into the bottle/volcano.
4. Put a few drops of dishwashing liquid.
5. If you want, you can put a few drops of food colouring.
6. Finally, pour quickly some vinegar and enjoy the eruption!

Art: Explore the life and work of Yayoi Kasuma. Yayoi Kasuma is a Japanese artists, who you can see is obsessed with dots! You can learn more about her by following these links:



<https://www.tate.org.uk/kids/explore/who-is/who-yayoi-kusama>

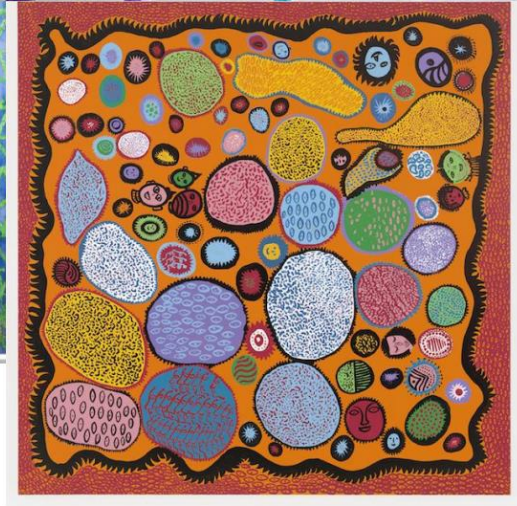
<https://www.youtube.com/watch?v=YvVABrPWxSI>

- How do you feel when you look at her work?
- What does it remind you of?

You are going to create your own spotty piece of art. Watch this video to see how one teacher created her own spotty pumpkin based on the ones that Yayoi creates:

<https://www.youtube.com/watch?v=LhvTkI3vZWU>

Now it's your turn. You need to create a bright picture made up of spots. You can draw a pumpkin too but you might want to choose a different object or vegetable. Top Tips: - Try to choose two contrasting colours so your picture stands out as much as one of Yayoi's. - Be precise, this will take time and focus. Here are some examples from other primary school students to help you.



STEM:

Stop the Spread

A STEM challenge tackling a global problem...
the spread of infectious diseases

No one wants to get ill



- Think about the last time you were ill.
- Was it a cough or a cold ? Something worse like measles?
What is the worst illness you have had?
- There are lots of different diseases.
Some happen everywhere whilst others, like malaria, occur more in developing countries where people do not have access to clean water and good hygiene and sanitation.



How do we get diseases?



- Infectious diseases are diseases caused by micro-organisms that penetrate the body's natural barriers.
- In two minutes brainstorm all the different diseases you know, here and around the world and divide them into infectious diseases and non-infectious diseases.



How do infectious diseases spread?



Any ideas?...

Brainstorm in two minutes!



Let's shake hands?



- Your Stop the Spread challenge will focus on preventing diseases that are spread by hand to hand contact.
- To help get you thinking about this topic you are going to do two short activities to discover more about...

1. How quickly infectious diseases can spread.
2. What you can do to reduce the spread of infection.



Infectious disease – a global problem



- Has anyone heard of the Global Goals or Sustainable Development Goals?
- In 2015 The UN put together a set of 17 Sustainable Development Goals (SDGs) or Global Goals to end poverty by 2030.
- Two focus on the prevention of infectious diseases... so it is a really important issue!



- Global Goal 3: Good health and well-being.
- Global Goal 6: Water and Sanitation.



What is already being done?



1. Educating children

<https://vimeo.com/169209845>



2. Child-to-child training

Read the case study from Kenya.

Briefly discuss some of the things that can be done to reduce the spread of disease in communities such as those in Kenya.



Your Stop the Spread challenge



Imagine you work for a charity and have received some funding to help pupils in a school in Kenya reduce the spread of disease in their school.

Your challenge is to:



1. **Build a model of a hand washing device** that could go in their playground which will enable them to capture rainwater then use it to wash their hands.
2. **Develop education materials** which will help children aged 8-11 understand why hand washing is important.
This could be a poster, animation, game, play, leaflet.

Key things to remember



1. For your hand washing device

- Remember it must be able to both collect and dispense water.
- It must use water efficiently (water is scarce in Kenya).
- Think about how to avoid cross-contamination.
- You have a budget – 125 credits, use it wisely!
- Use locally available, sustainable materials when possible.



Key things to remember



2. For your education materials

- Be creative, children are more likely to remember something presented in an interesting, fun way.
- Do your research to get key facts and figures.
- 8-11 year olds in Kenya may have low levels of literacy.
- Make sure your main messages stand out.
- Consider using more than one way of getting your message across.
Game, poster, song, play etc.



What do they do in Kenya?

- Engineers in Kenya have come up with a simple design for a hand washing station which is widely used and looks like this...



- It's called a 'Tippy Tap'.
It only dispenses water, it doesn't collect it.
 - How does your model compare to this?
- Do you think your model is better?



THANK YOU FOR LOOKING AT STOP THE SPREAD. WE APPRECIATE IT IS A REALLY DIFFICULT TIME FOR YOU RIGHT NOW, TRYING TO BALANCE MANY THINGS INCLUDING KEEPING YOUR CHILD/ CHILDREN ENGAGED AND INTERESTED IN LEARNING.

Whilst you are not expected to 'home school' we know that many parents and carers like yourself are looking for engaging activities you can do together as a family and/or that your children can do with minimal supervision.

THE CHALLENGE

To build a model of a hand washing device that could be used in a primary school in Kenya, to help stop the spread of an infectious disease.

WHY WOULD I CHOOSE STOP THE SPREAD?

Stop the spread is one of several Practical Action's STEM (Science, Technology, Engineering and Maths) challenges that are very popular with schools. They are often used in STEM/ science clubs, for enrichment days and events like British Science Week. This is because they fit the curriculum and are hands-on activities children love. You can see them all at: practicalaction.org/stem

Each challenge looks at a problem faced by a community in the developing world, and asks the children to develop a model of their own solution. They then have the chance to look at the real - life solutions already in place around the world with the support of Practical Action. Because they are set in different countries they also give children the opportunity to find out more about those countries and the lives of people who live there.

Most of our challenges, including this one, don't require any fancy science equipment, children can take part in the challenge using materials readily available in your home.

Please look at the Teacher's guide and Power-Point before you get started. You do not need to do all the activities, just select what you and your child/children find interesting and will enjoy doing.

practicalaction.org/schools/stop-the-spread

WHAT WILL WE NEED?

For the model: modelling equipment e.g. plastic bottles, K'NEX, pulleys, skewers, straws, string, plastic bottles, Blu Tack, canes, sticky tape, plastic cups, lollipop sticks, cotton reels, glue, string and something to make holes with.

For testing: jugs, water and an outside space, or use the kitchen but have a mop ready!

WHAT AGE IS IT SUITABLE FOR?

Because of the open-ended nature of our STEM challenges they are suitable for a wide age range, so you could easily set them as a project for a 7 year old or a 14 year old, or even (depending on your children!) get them working together on one.

ANYTHING ELSE I SHOULD KNOW?

Each challenge has a certificate you can print out to give to your child/children once they have finished the challenge. We think this is a nice touch and gives you something to put on the fridge!

Also, all our challenges are accredited for the CREST Award scheme, Discovery level. You can go on the website and submit your child's work to gain an award. More details at: cresta-wards.org

We hope you and your child/children enjoy our challenges. If you are happy to share any videos or pictures to inspire other parents and carers we would really love to see them! Please email them to us schools@practicalaction.org.uk or tag us on twitter @PA_Schools or Facebook /Practical Action Schools.



**Practical
ACTION**

1 PUPIL NOTES: DROP BY DROP GUIDE

Imagine you are charity workers working with a group of primary children in a school in Kenya to improve their general hygiene. Your task is to encourage them to wash their hands more frequently and to help them understand why this is important in reducing the spread of infectious disease in their community.

Your task is in two parts:

1. Design, build and test a working model that will collect rainwater that can then be used by pupils to wash their hands when in school.
2. Produce education materials on why hand washing is important in preventing the spread of infectious diseases in a format they will find engaging and learn from.

Drop 1 – Getting organised

Decide on a team name. In your team decide who is going to have which role based on their strengths. Suggestions based on real STEM careers are Product Designer, Engineer, Science Researcher, Finance Manager and Science Communicator. In a small team one person may have two roles.

Drop 2 – Researching

Researchers in your team should lead on finding out about some of the problems caused by poor hygiene and the importance of hand washing.

Drop 3 – Designing your model

Work with the Product Designer in your team to draw an initial design for your model.

- Key points to remember are:
- It must be able to both collect and dispense water
 - It must use water efficiently (water is a scarce resource in Kenya)
 - Think about how to avoid cross-contamination
 - You have 125 credits. It is the Finance Manager's job to keep control!

Drop 4 – Building your model

The Engineer in your team should lead on building your model according to your design. Remember you can redesign as you go along to improve your device.

Drop 5 – Testing and redesigning

Test your model. If you can see how to improve your model then do so. Can you keep the same design but use cheaper materials? When you have a model you are happy with draw your final design.

Drop 6 – Creating education materials for primary pupils

This is where the Science Communicator takes the lead. Decide on a way to communicate the importance of hand washing to 8-11 year olds in a way that will encourage them to do it! Be creative, think about a game, animation, poster, leaflet, play etc.

Drop 6 – Sharing your work with others

Prepare to present your work to the rest of the class, imagine they are funders who might invest in your device. In your presentation, you will need to show your designs, demonstrate your model (by pouring water into it and showing how it could wash hands) and show the education materials you have produced for primary children. Look at the judging criteria to see what you will be scored on and plan your presentation accordingly.

Drop 7 – Evaluating the work of others

Use the sheet provided to assess the other groups and their presentations. Remember to give constructive feedback – what worked well? What could be improved?

2 INFO SHEET: MATERIAL COSTS

You will need to buy materials to make your hand washing model. Each modelling material represents a 'real' material you would use if you were building a hand washing device in Kenya. These can be divided into:

- Locally sourced materials – these are available close to the school and in the village e.g. bamboo, plastic bottles, rope. You should aim to use as many locally sourced materials as possible as they are more sustainable
- Imported materials – these will need to be transported from a town or city further away. Generally they cost more to produce and you have to pay for the transport into the village.

As an important part of your design you will need to balance the cost of materials with their quality and their impact on the environment.

Budget

Your budget is 125 credits. Keep track of how much you are spending on your cost record sheet. Anything you use not listed on this sheet is free.

Trading

Once you have bought materials you can't just give them back if you don't use them...so think carefully before you buy! If you do have material that you don't need you can trade with other groups.

Locally sourced materials	Modelling equivalent	Cost per unit
Bamboo stick	Wooden skewer, lolly stick, straw	2 each
Rope	String	1 per 5cm length
Plastic/milk bottles	Plastic drinks bottles/milk bottles	free
Tape	Sticky tape/masking tape	2 per 5cm length
Bonding material	Blu Tack	2 per small piece
Glue	Glue	free
Imported materials	Modelling equivalent	Cost per unit
Steel pole – long	K/NEX – long piece (8cm of longer)	5 each
Steel pole – short	K/NEX – short piece (up to 8cm)	3 each
Connector	K/NEX connecting piece/paper clip/split pin	2 each
Pulley	Pulley	10 each
Sheet of wood	Card	3 per 10cm ² piece

6 CASE STUDY: SCHOOL CHILDREN 'STOPPED THE SPREAD' IN KENYA



Life in Mukuru

Mukuru is one of the largest slums in Nairobi, the capital of Kenya with a population of over 500,000 people. Most people living in Mukuru live in one-room houses made from corrugated iron sheets.

The water and sanitation facilities in Mukuru are very scarce. A recent survey found that only 11% of families had access to their own household toilet and that the majority of people used a community toilet, often shared with up to 1,000 other people. Hand washing facilities are even scarcer leading to poor hygiene and the spread of diseases such as cholera.

Watch this video about the cholera outbreak in Mukuru:
www.youtube.com/watch?v=Rv7h1TWp0ZI

Improving health and hygiene

In 2007, a project organised by the development charity Practical Action and Nairobi's City and Water and Sewerage Company was set up to improve the health of people living in Mukuru. The project aimed to:

- improve the water supply and build new toilet blocks and washing facilities
- deliver training for a health campaign to promote good hygiene practice.

The health campaign

The health campaign targeted over 2,500 young women and 4,000 school children living in Mukuru. The main messages were around the proper use of toilets and the importance of hand washing after a toilet visit.

In the eight schools that were targeted, the trainers used the Child-to-Child approach. This method is based around children gaining understanding of the main health issues that affect their community then develop their own ways of sharing the health messages to encourage other children and their families to take action.

The school children involved in the Child-to-Child training developed a range of creative ways to communicate their health messages including the use of puppets and developing songs, plays and posters.

The children involved in the project continue to wash their hands to prevent the spread of disease.

7 INFO SHEET: WHY SANITATION MATTERS



CLEAN WATER AND SANITATION: WHY IT MATTERS

What's the goal here?

To ensure access to safe water sources and sanitation for all.

Why?

Access to water, sanitation and hygiene is a human right, yet billions are still faced with daily challenges accessing even the most basic of services.

Around 1.8 billion people globally use a source

of drinking water that is fecally contaminated.

Some 2.4 billion people lack access to basic sanitation services, such as toilets or latrines. Water

scarcity affects more than 40 per cent of the global population and is projected to rise. More than 80 per cent of wastewater resulting from human activities is discharged into rivers or sea without any treatment, leading to pollution.

6 CLEAN WATER AND SANITATION



Water scarcity affects more than 40 percent of the global population and is projected to rise.

What are the effects of this?

Water and sanitation-related diseases remain among the major causes of death in children under five; more than 800 children die every day from diarrhoeal diseases linked to poor hygiene.

Proper water and sanitation is a key foundation for achieving the Sustainable Development Goals, including good health and gender equality.

By managing our water sustainably, we are also able to better manage our production of food and energy and contribute to decent work and economic growth. Moreover, we can preserve our water ecosystems, their biodiversity, and take action on climate change.

What would it cost to correct the problem?

A study by the World Bank Group, UNICEF and the World Health Organization estimates that extending basic water and sanitation services to the unserved would cost US\$28.4 billion per year from 2015 to 2030, or 0.10 per cent of the global

product of the 140 countries included in its study.

What would it cost if we don't correct the problem?

The costs are huge—both for people and for the economy.

Worldwide, more than 2 million people die every year from diarrhoeal diseases. Poor hygiene and unsafe water are responsible for nearly 90 per cent of these deaths and mostly affect children.

The economic impact of not investing in water and sanitation costs 4.3 per cent of sub-Saharan African GDP. The World Bank estimates that 6.4 per cent of India's GDP is lost due to adverse economic impacts and costs of inadequate sanitation.

Without better infrastructure and management, millions of people will continue to die every year and there will be further losses in biodiversity and ecosystem resilience,

undermining prosperity and efforts towards a more sustainable future.

What can we do?

Civil society organizations should work to keep governments accountable, invest in water research and development, and promote the inclusion of women, youth and indigenous communities in water resources governance.

Generating awareness of these roles and turning them into action will lead to win-win results and increased sustainability and integrity for both human and ecological systems.

You can also get involved in the World Water Day and World Toilet Day campaigns that aim to provide information and inspiration to take action on hygiene issues.

To find out more about Goal #6 and the other Sustainable Development Goals, visit:

<http://www.un.org/sustainabledevelopment>



SUSTAINABLE DEVELOPMENT GOALS
17 GOALS TO TRANSFORM OUR WORLD