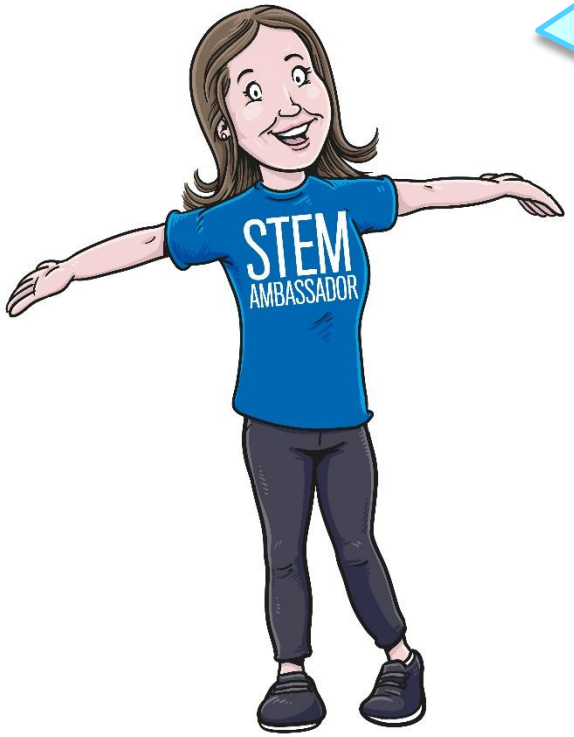
February 2021 – Spring Term

#SolveItWithSTEM@Home Infant and Primary Activity Pack

Friday 12th February 2021

Welcome back everyone…



Hey everybody…we hope you are well and have had an exciting week! Some of you may have seen a blanket of snow by your doorsteps…how fun!!

Did you know on Thursday 11th February it was the **International Day of Women and Girls in Science**? So many different women around the world are involved in STEM. Why not check out the Curiosity Camp at GoldieBlox on Youtube?! You will get to learn about the cool parts of STEM led by very talented guides!

This week our theme is **Colour**! We have a couple of fun activities surrounding the rainbow…and why not colour in Eddie? He is looking rather pale over there…

As always, remember to share these packs with your family and friends online – just visit www.fawleyonline.org.uk

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Activity: Rainbow melting ice

(Make sure you have an adult help you with this activity)

The items you will require include:

- Ice
- Coarse sea salt
- Food colouring in the primary colours (**red, yellow, blue**)
- 7 x small bowls or glasses
- Large deep tray
- *Optional* – purple gel food colouring

Instructions:

- First you will need to freeze a big block of ice. Use a rectangular shaped lunch box and fill it with water. Leave overnight in the freezer.
- In the seven small bowls, add half a tablespoon of salt to each and a couple of drops of food colouring. Here, we are making the **rainbow** colours so you can create the seven rainbow colours using the primary colours stated above…e.g couple of drops of **red** food colouring can go in the first bowl, couple of drops of **red** and **yellow** can go in the second to make **orange**….can you guess what the rest are? Alice can help you…*(the purple gel food colouring is optional in case you have trouble mixing and creating it! Obviously, if you have the some of the colours already in your food colouring collection then please use these.)*
- Mix the salt and the food colouring together in each bowl.
- Once you have all the colours ready, remove the big block of ice from the freezer and its container. Then, place the ice on a deep tray big enough to collect any water as it melts.
- Using the colours, sprinkle a rainbow on your block of ice.
- Sit back and watch the salt eat away at the ice. If you look closely, the salt will produce craters where it touches and the colour will slowly sink!

This fun activity was taken from:
Rainbow Melting Ice Experiment for Preschool Children (powerfulmothering.com)

Mixing colours…
Red + yellow = orange
Blue + yellow = green
Red + blue (dominant) = indigo
Red (dominant) + blue = violet

Experiment: Rainbow Science

(Make sure you have an adult help you with this activity)

Items Required:

- 7 x small clear plastic cups or glasses
- Kitchen roll
- Food colouring in the primary colours (red, yellow, blue)
- Water
- Scissors

Instructions:

- Place the seven cups in a row and pour water in the first, third, fifth and seventh cup. Cups need to be about ¾ full.
- Add five drops of red food colouring to the first and seventh cup.
- Add five drops of yellow food colouring to the third cup.
- Add five drops of blue food colouring to the fifth cup.
- Take four sheets of kitchen roll and rip them all in half. Once they are all ripped, fold them all separately in half lengthwise and in half again, lengthwise.
- The folded sheets should be long enough in length to be placed with one end in the first cup and the other end in the second cup next to it. This will help the water walk. Repeat this step with the other pieces of folded kitchen roll, placing one end in the second cup and the other end in the third, and so on. Continue this until the last folded kitchen roll is placed in the sixth cup and the seventh. You may have a piece of kitchen roll left over – this can be disposed of.
- Look at the cups and watch what starts to happen. You should be able to see the coloured water begin to crawl up the kitchen roll.
- Keep checking back every couple of minutes – soon you will be able to see that the water has crawled all the way up the kitchen roll and begin to walk back down into the empty cup next to it.
- Since the cup on either side of the empty cup has coloured water in it, the two colours begin to mix in the empty cup…so cool!
- Keep coming back during a two hour period and observe what is happening.

The water moves up the paper towels through a process called capillary action. The paper towel is made from fibres and the water is able to travel through the gaps in the fibres. The gaps in the paper towel act like capillary tubes and pull the water upward. This is what helps water climb from a plant's roots to the leaves at the top of the plant or tree.
The water is able to move upward against gravity because of the attractive forces between the water and the fibres in the paper towel.

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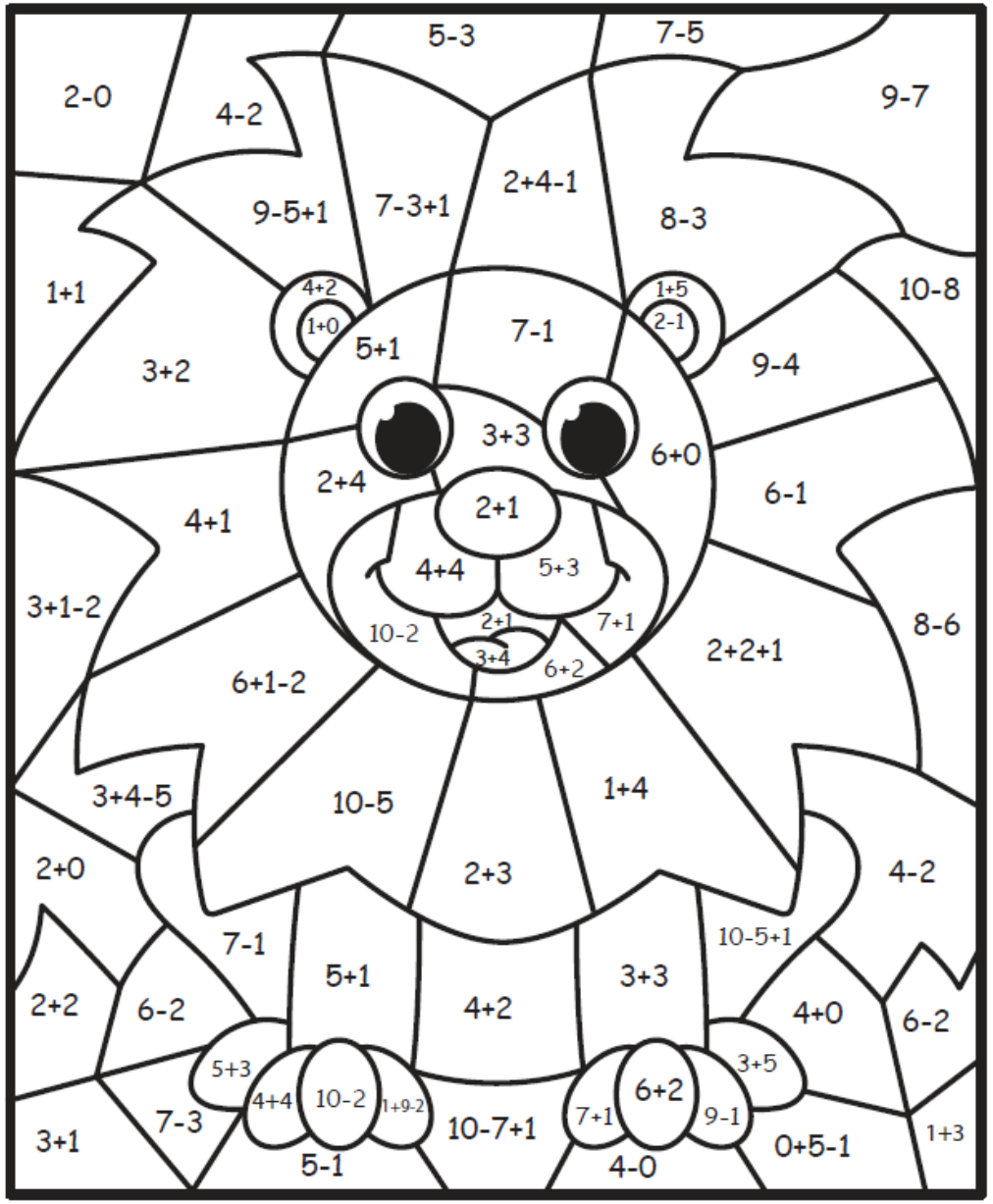
Maths:
Colour by calculation



1 - pink 2 - blue 3 - black 4 - green

5 - brown 6 - orange 7 - red 8 - yellow

www.sparkling-minds.com

Keeping in line with this week's theme...colour by calculation!

Work out the calculations to see what colour you need to complete the lion.

This great idea was taken from www.sparkling-minds.com – they have many more you can do too!

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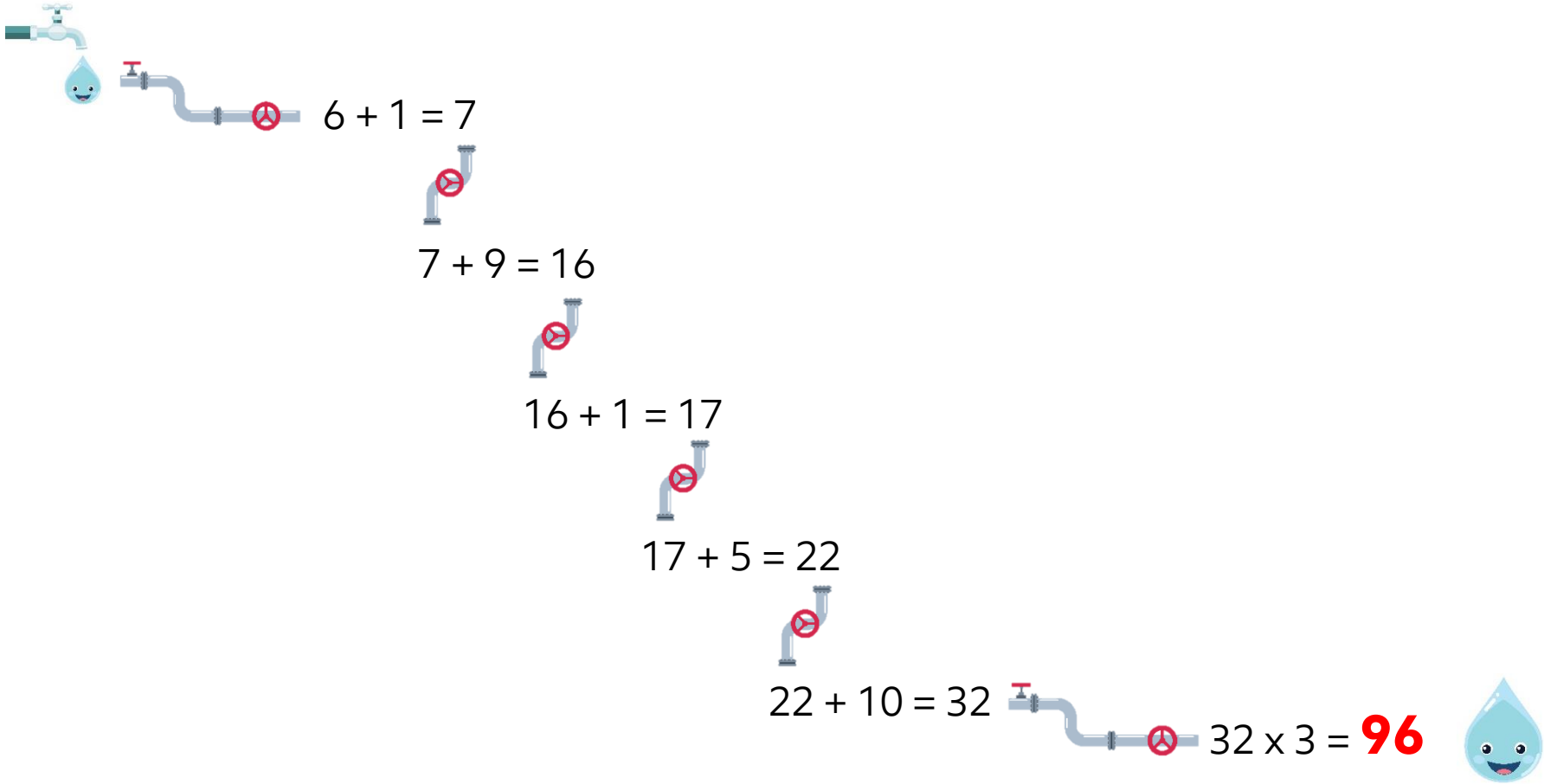
Answers: w/e 5th February 2021 STEM Pack

Maths (Page 5) – Water pipe challenge



We hope you enjoyed this week's activities.

Another pack will be on its way to you next week…

Best wishes
The ExxonMobil Fawley #SolveItWithSTEM Team!