



Jupiter Class – Roley’s Ten Day Challenge – Set 4

Creativity	Challenge	Curiosity	Caring	Fun
<p>Design a shelter suitable for the rainforest. Draw a labelled diagram. What materials would you use for the roof and walls? How would you protect it from floods?</p> <p>Animal prints. Using a variety of media (newspapers/magazines /fabric/wrappers) create animal prints for a mammal, insect, amphibian, reptile and a bird of your choice. After, you can create a collage of all the prints you have made.</p> <p>Make a home-made rainstick – instructions attached if needed.</p>	<p>Complete Roley’s maths challenges (see below).</p> <p>Writing challenge: Talk for writing. Follow the link below and complete the activities.</p> <p>Year 5: https://www.talk4writing.co.uk/wp-content/uploads/2020/04/Y5-Maria-Rhi.pdf</p> <p>Year 6: https://www.talk4writing.co.uk/wp-content/uploads/2020/04/Y6-James.pdf</p>	<p>Science at home. Follow the link to try out some of the suggested experiments: http://www.sciencefun.org/kidszone/experiments/</p> <p>Research the life cycle of a frog or butterfly. Draw a labelled diagram to show the stages. Can you think of a creative way to show this?</p> <p>Research a rainforest. Create an information sheet/PowerPoint providing information all about the rainforest. An example could be the Amazon or Congo.</p>	<p>Plan a fundraising event to raise money for the NHS. Share your idea with us when we return to school.</p> <p>Make a heart to show your love for the NHS and keyworkers. This could be made from salt dough, pebbles in your garden, bread anything at all!</p> <p>It is important that we continue to look after one another once this time has passed. Write or record a pledge to your family or community.</p>	<p>Research about animals found in the rainforest and use the information to create a ‘Top Trumps’ game. Make the cards and play the game.</p> <p>Drama – watch weather forecasts. Listen for key/buzz words. Write and act out a weather forecast for a rainforest area.</p> <p>Listen to the ‘Spirit of the Rainforest’ music and imagine you are different animals in the rainforest. Create a dance considering how the animals would move.</p>



Hello! Please choose at least two activities from each list to complete. Please bring your work back to school in the folder that you have been given so that you can share it with your class teacher and friends. Email any photos of your learning into school so that we can see what you are getting up to! Thank you.



Reach 100

Here is a grid of four "boxes":

You must choose four **different** digits from 1–9 and put one in each box. For example:

5	2
1	9

This gives four two-digit numbers:

52(reading along the 1st row)

19(reading along the 2nd row)

51(reading down the left hand column)

29(reading down the right hand column)

In this case their sum is 151.

Try a few examples of your own.

Is there a quick way to tell if the total is going to be even or odd?

Your challenge is to find four **different** digits that give four two-digit numbers which add to a total of 100.

How many ways can you find of doing it?

Four Integers

1. Using four different integers and the x symbol make the highest possible result.

All the integers have to be used.

For example: 3, 7, 5, 1 gives $157 \times 3 = 471$ or $37 \times 51 = 1887$.

2. Now chose four other integers and make the largest result using only multiplication.

3. What conclusions can you make?

4. What predictions can you make about 5, 6, ... digits?

Lunchbox Riddle

1. Amy, Billy, Chloe, Danielle and Emma each own a lunchbox. The lunchboxes are standing in a straight line in the dining hall.

2. Each lunchbox is a different colour.

3. Each lunchbox contains a sandwich, a drink and a piece of fruit.

4. Each child has a different sandwich, a different drink and a different piece of fruit.

The question is *'Who has a pear for lunch?'*

Facts:

Amy has a red lunchbox.

Danielle has a banana for lunch.

Billy only drinks squash.

The green lunchbox is on the left of the white lunchbox.

The green lunchbox's owner drinks lemonade.

The person who eats tuna sandwiches has a peach.

The owner of the yellow lunchbox has a ham sandwich.

The lunchbox in the middle contains milk.

The first lunchbox belongs to Emma.

The lunchbox with the egg sandwich is next to the one with the orange.

The apple is in the lunchbox next to the one with the ham sandwich.

The owner of the cheese sandwich has cola to drink.

Chloe only eats jam sandwiches.

Emma's lunchbox is next to the blue one.

The water-drinker's box is next to the egg-eater's box.



Using the numbers 1-9 (only once each) fill in the equation square.

	X		/		12
X		-		+	
	+		X		51
+		-		X	
	+		X		12
61		-9		5	

	+		X		56
X		+		X	
	X		+		29
-		-		-	
	/		-		-3
26		3		2	

These times tables are a mystery. Each digit has been replaced by a letter and the order of the times tables has been jumbled up!

Can you work out which digit each letter stands for?

Try to spot patterns in the digits so you can rule out certain numbers and rule in others.

Can you work out which times table is the 11 times table or the 1 times table?

Does the number of single digit answers help you work out which times table it could be?

M = N = P = Q = R =

S = T = U = Y = Z =

$Y \times Z = Z$

$Z \times Z = S$

$T \times Z = YP$

$M \times Z = YQ$

$N \times Z = PY$

$YY \times Z = ZZ$

$Q \times Z = PT$

$U \times Z = YU$

$YP \times Z = ZM$

$P \times Z = M$

$S \times Z = PN$

$YR \times Z = ZR$

Mrs Daone loves roses. In her garden she has half as many pink roses as red and four times as many red ones as white.

There are 36 roses that are either yellow or white. Twenty are yellow.

How many roses are in Mrs Daone's garden?



Make your own Rainstick!

In many cultures, summoning rain often included the use of musical instruments. One well-known example is a rainstick, an instrument that mimics the sound of rain. They are traditionally made from dead cactus tubes with cactus spines hammered to the inside and filled with tiny pebbles.

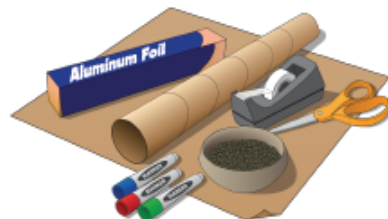


The origin of the rainstick is not fully known, but many people think that it probably came from a group of indigenous people known as the Diaguita from the deserts of northern Chile.

Here you get to build a slightly less traditional rainstick of your own! This one is made from a cardboard tube and aluminum foil.

What you need:

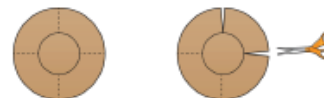
- A long cardboard tube (paper towel or wrapping paper tube). About a two inch diameter is best.
- Aluminum foil
- Small dried lentils, unpopped popcorn, dry rice, or tiny pasta.
- Tape
- Scissors
- Crayons or markers



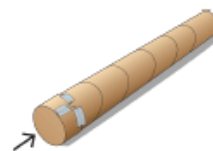
What you do:

1. Trace around the end of your tube onto a piece of brown paper (or construction paper).
2. Draw a circle that is two times bigger than your first circle (around that first circle) and then draw four or so spokes between the two circles.

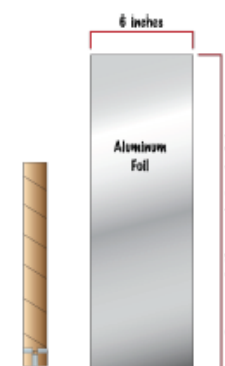
3. Cut along the spokes.



4. Tape the spokes onto one end of your tube.



5. Cut a few pieces of aluminum foil that are about one and half times the length of your tube and about 6 inches wide.

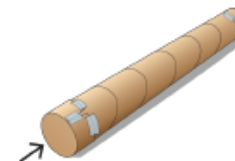


6. Crunch the aluminum foil pieces into long, thin, snake-like shapes. Then twist each one into a spring shape.



7. Put the aluminum foil springs into your tube.

8. Pour some dry beans, dry rice, or unpopped popcorn into your tube. The tube should only be about 1/10 full. You can experiment to see how different amounts and different types of seeds and beans change the sound.
9. Make another cap from brown paper (the same as the first three steps) and cap your tube.



10. Optional: Decorate the tube by covering it with brown paper or construction paper, and then making designs with crayons or markers (or cut-out paper or stickers).

