

Maths Homework Grid (KS1)

Money

The Great Pet Sale

Read The Great Pet Sale or watch via the link below

<https://www.youtube.com/watch?v=1ISVfZAVD6o>

Can the children work in groups to create labels for each of the pets in the book? Can they add prices to the labels? Can they add the coins that could be used to make each of the animals in the book?

As much as possible set up the pet shop from the book using cuddly toys and add price tags onto them. Give the children an amount of money to spend at the Pet Shop. What will they choose to spend? What change will they receive? Continue to allow the children to play shop.

If there was a half-price sale how much would the pets cost? Which prices can we find half of and which can't we find half of? Why?

What if the amount was doubled?

How many ways can you make £1.00 using different animals?

Hide one of the pets - write directions to get the toy.

If you wanted to take one of your pets home how you would look after it? Does it need a cage? What shape cage would your pet like?

Maths Games

Choose a maths game to play each day.

Have a go at inventing your own maths game.

Link to a blog on maths games:

<https://matr.org/blog/fun-maths-games-activities-for-kids/>

Prepare some price lists for items that are needed to look after pets for the children to look at. How much would it cost to look after your pet for 10 days? If you went to the shop to buy some pet food and you had 10p/£1 to spend, how much change would you have?

Open ended investigations/problems

Fishing On card draw and cut out some spotty fish. Create a magnetic fishing game for the EYFS children to play by attaching paperclips to the fish and dangling some magnets on string. They need to catch as many fish as they can. They should then draw their fish and count how many spots they have in total. The children in all year groups can play this game as an introduction to the following activities.

Y1 to solve related problems. All the fish in the 'tank' have either 5 spots or 2 spots. How could you catch 10 spots? If an EYFS child counts 26 spots, which fish might she have caught? Give children 26 counters and pictures of fish. Can they put their counters onto the fish in groups of 2 and 5 until they find a solution? Repeat the activity with different numbers e.g. 17, 39

Y2 could have a go at a similar activity to Y1 with fish having 2 spots, 5 spots and 10 spots. Can they apply times tables facts and use multiples to speed up the process rather than using counters practically? They could do work out which amounts they could make with 2 fish, 3 fish. Which amounts between 1 and 20 can we make? Can children predict which amounts we will be able to make and those

Open ended investigations/problems

Dominoes and Dice (Remove all of the dominoes with blanks on) Give the children a set of dominoes and some dice. Can they spend some time playing with the dominoes and making up their own games with the dominoes?

Can children roll 2 dice and then find the matching domino e.g. if you roll a 4 and 2 you need to find the 4:2 domino.

Find the total amount of dots on the domino and put it into a group for that total.

Questioning EYFS Which 2 numbers can you see on the dice? Y1 What is the total number of spots? How did you find the total? Did anyone do it another way? Y2 Can you predict another dice roll/domino that will make the same total as this? Which total do you think will have the most matching dominoes?

Continue to roll dice, collecting matching domino and putting it into a group for the total. The first to match all the dominoes is the winner.

<p>that will be impossible to make. E.g. do you think we will be able to make 26, 39, 54. Extend the activity to different contexts e.g. I have some triangles and pentagons in a bag. I can feel 14 sides what shapes have I got? I have 2p, and 5p coins in a bag. I have 18p. Which coins do I have?</p>	<p>You could ask children to arrange their dominoes for each total in a pattern and see if they can work out which dominoes are missing at any given point. Y2 could use a 0-9 dice and work out all the possible totals and what the matching dominoes would be. They could even make the dominoes and arrange them in order (working systematically)</p> <p>At the end you could ask children to show you a 'double' domino. What is the total? Did you just know it? Now show me a 'near double'. How can you use the doubles fact you know to help you calculate the total?</p> <p>Other dominoes activities include EYFS - just playing dominoes - matching numbers Y1 - remove the dominoes with 6 on. Instead of matching numbers to lay a domino the two ends must total 5. Can they record all the ways to make 5 systematically after the game? Can they now record all the ways to make 6 systematically? Y2 - Try to solve the 4 Dom puzzle from nRich. Can you make one up with different dominoes and a different total?</p>
<p><u>Open ended investigations/problems</u></p> <p>Potions Lab You need a selection of containers (bottles, jugs, cups, yoghurt pots etc). Some bottles should be clear and identical. In an ideal world you could set up something like this for EYFS as shown on rockmyclassroom.com. The water has aqua beads in. This allows the children to count these to work out the capacity of the scoops and containers. They can also put the beads onto the numicon to just practise 1:1 correspondence and counting. You don't need to use water and beads, you could also use pompoms or even multilink to investigate capacity without water. You could also use water and allow them to use direct comparison by pouring into identical jugs.</p>	<p><u>Open ended investigations/problems</u></p> <p>What a day! Make a poster that has 10 activities for children to do (e.g. go-karting, painting, swimming) including a café they can eat at. Next to each activity indicate how long it lasts (duration). To make it visually simple you could shade in clock faces like this.</p>

Also ensure understanding of volume vocabulary full, half-full and empty.

Y1 could estimate how many cups of water/rice would fit into a larger container. You could write down their estimates and then they could check. They could then use a different sized cup or yoghurt pot and repeat the process. Why is the number different? If we want to see which of these containers has the bigger capacity what could we do? Elicit the idea that we need to use the same unit for both containers. They could attach a thin strip of paper and mark the level as they add each cup. This would help them to keep count. Why are the gaps a different distance apart on the 2 containers? Do the containers hold the same amount when they are full? Could you put the containers in order?

Show Y2 children a 1 litre jug, bottle or measuring cylinder. Give them a set of containers that they could sort by capacity into greater than 1 litre/1litre exactly/less than 1 litre. They could then use the original 1 litre object to check if they were correct. Ask them to move onto using the original container to measure and record how many ml each container holds then put them into order.

You could give children a range of coloured liquids using water and food colouring and a recipe for a magic potion. You could give each colour a potion name, e.g. green = slime juice

e.g. EYFS - 1 cup of blue, 2 cups of red and 3 cups of green Year 1 - $\frac{1}{2}$ cup of blue, $\frac{1}{4}$ cup of red and $\frac{1}{4}$ cup of green, can they see that this is 1 cup? How else could they fill their cup? Year 2 - 20ml of blue, 50ml of red and 30ml of green, what is the total of the liquid? How



1 hour



half an hour



quarter of an hour



three quarters of an hour

You could also indicate a price next to each activity and for food items at the café.

EYFS could have each activity lasting for 1 hour and costing £1. They could have strips of card for each activity. Their main focus would be to put activities in order including 3 meals breakfast, lunch and dinner. They could find out the total cost of their day at the end by collecting the correct number of pound coins and counting them carefully using 1:1 correspondence.

Y1 could have activities that last for an hour or half an hour and cost £1, £2 or £5. They could start their activities at 10am and finish at 4pm and they have to make sure they stop for lunch. Show the children how to move on 1 hour on a clock. Show the children how to move on half an hour from an o'clock start time and a half-past start time. They should plan their perfect day. How will you record your activities including the start and end times? How will you check if they all fit? How long will lunch take (needs to be an hour or half an hour)? What time do you eat lunch? Once you are certain your timetable fits, calculate how much money you will need to ask for to pay for it all.

else could you fill a 100ml cup with potion? What different combinations can you find? Can you work systematically to find different ways of filling your cup?

Now work out what you will eat for lunch and add that to the total as well. How much money do you need altogether?

Y2 could have activities that last for any of the durations above or combinations of them- $1\frac{1}{2}$ hours for example - here you will need to draw 2 clock faces next to the activity. Their day could also be longer e.g. 9am - 5pm. They would then plan their day in a similar way to Y1, keeping track of the durations using an analogue clock and making jottings. The prices for their activities could be differentiated and they would also have to calculate the cost for their day at the end. As an extension you could limit the amount of money they have and make them plan a day that they can afford where they are always doing something.