Pevensey & Westham CE Primary School

more amazing every day

Maths is fun

Year 4

This booklet contains fun maths activities and games, matched to the Year 4 Learning Objectives.

You can share photos or work completed during these games via Class Dojo. We would love to see what fun you've been having as a family!

Place Value number creator

WALT: Use digits to make the largest or smallest number.

You will need: a pack of cards Aces—9, paper with Thousands, Hundreds, Tens and Ones chart on and a pencil.

- Have all of the cards face down in a pile.

- Take turns to turn over a card.

- Write that digit into your place value chart.

The person with the largest number at the end of the game is the winner.

- Play 5 times or more.

Can you say how much each digit

Thousands	Hundreds	Tens	Ones

Challenge: Can you make the smallest number to win? Can you order the numbers you have both made from smallest to largest using a blank number line?

Yoikes

WALT: identify 10 more and 10 less than a number.

**You will need:** At least three participants (Two players and one number caller)

- Each player draws 10 dashes onto their paper.

- The number caller calls out a random number between 1 and 100 and each player writes that number onto one of the dashes. (Once a number is placed, it can never be moved. Also, a larger number may NEVER be written to the left of a smaller one. So, the aim of the game is to use skill (and some luck) to decide which dash to place each number on.)

- Repeat this 10 times.

- If a player is unable to place a called number without breaking the rules, they must shout "Yoikes!" and write the number in the bin instead.

The person with the most numbers on the dashes is the winner.

Challenge: Can you get all 10 of the numbers on the dashes and no numbers in the bin?
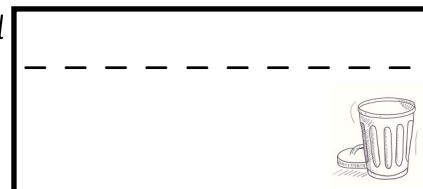
Column addition

WALT: Use column addition to add two 4 digit numbers.

You will need: pack of playing cards (remove the 10 cards from the pack), paper, and a pencil.

- Select 8 cards to create two 4 digit numbers. (If you chose the picture cards, use them to represent a zero and an ace is a one.)

- Arrange the cards into the column addition format as seen above.

- Add the numbers together.

$$+ \quad 8 \quad 5 \quad 5 \quad 1$$

$$1$$

Challenge: Can you create numbers to add together that include up to two decimal places? How can you check your answers?

Domino multiplication

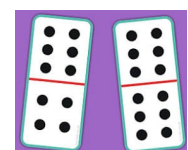**WALT:** recall multiplication facts up to 12 x 12.

You will need: Dominoes, paper and pen (optional).

- Put some dominoes face down.

- Shuffle them.

- Each chose a domino.

- Multiply the two numbers.

- Whoever has the biggest answer keeps the two dominoes.

- The winner is the person with the most dominoes when they have all been used.

6 x 4 = 24   6 x 6 = 36   Winner

Websites to visit for learning multiplication facts:

https://www.topmarks.co.uk/maths-games/7-11-years/times-tables

http://www.primaryhomeworkhelp.co.uk/maths/timestable/interactive.htm

10 x 12 = 120
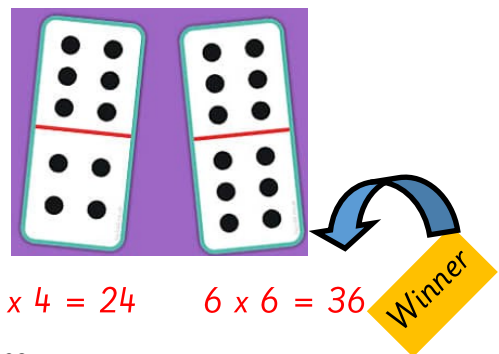
Challenge: Can you be the quickest to multiply both dominoes by each other?

Multiplication: Dice game

WALT: multiply 2 numbers.
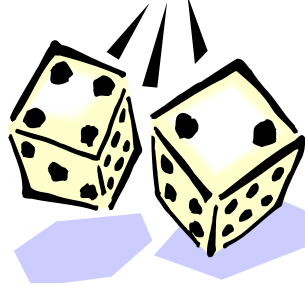
You will need: Three or four dice/ number cards or playing cards.

Choose which column method you feel most comfortable with.

- Take turns to roll two dice. Use these to create a 2 digit number.

- Roll the third dice.

- Multiply the 2 digit number by the number on the fourth dice.

- Use the pen and paper to solve the question.

H	T	O	
	3	4	
×		5	
	2	0	(5 × 4)
+ 1	5	0	(5 × 30)
1	7	0	

H	T	O
	3	4
×		5
1	7	0
	1	2

Once your child has grasped multiplying a 2 digit number, move onto 3 digits.

Challenge: Can you use the dice to work out division sentences too?

Measuring and comparing decimals

WALT: compare numbers with two decimal places.

You will need: tape measure, pencil and paper for recording.

- Use a tape measure that shows centimetres.

- Take turns measuring lengths of different objects, e.g. the length of a sofa, width of a table, length of the bath, the height of a door.

Can your estimate the length of each object before you measure it? How accurate are your estimations?

- Record the measurement in centimetres, or metres and centimetres if it is more than a metre, e.g. if the bath is 165 cm long, you could say it is 1m 65cm (or 1.65m).

- Write all the measurements in order.

Challenge: Can you work out how many cm/ m away from the actual length your estimation was?

More than half

WALT: order and find equivalent fractions.

You will need: two dice, paper with Person A and Person B on them with the grids drawn (See image below)

- First, decide who is Person A and who is Person B.

- When it's your turn roll both dice.

- Use the numbers to make a fraction. (It doesn't matter which number you put on top.)

- f that fraction belongs in one of your columns, write it there. If it doesn't, do nothing.

- Go on until one column has 8 fractions. Count the fractions in your columns. The person with most fractions wins the game. Now swap roles and play again.
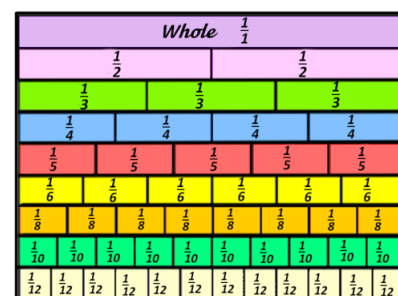
Person A		
less than half	exactly half	between ½ and 1

Person B	
exactly 1	greater than 1

Challenge: How many equivalent fractions can you create using the dice?

Problem solver

WALT: solve problems.

You will need: a problem, any resources you think may be valuable. For this activity you will need 15 1p coins and some pots/ bags or circles drawn on paper.

Ram divided 15 pennies among four small bags.

He labelled each bag with the number of pennies inside it.

He could then pay any sum of money from 1p to 15p without opening any bag.

How many pennies did Ram put in each bag?

Challenge: Can you present your findings in a table? How many different combinations of coins can you think of?

Why not try more problems on the following website: https://nrich.maths.org/search/?search=year+4&tab=1&fs=110110001000111

Multiplication activity:

- Shade in all the tables facts that your child knows, probably 1s, 2s, 3s, 4s, 5s and 10s confidently.

- Some facts appear twice, e.g. 7x3 and 3x7, so cross out one of each.

> Are you surprised by how few facts are left?

- There might only be 10 facts to learn. So take one fact a day and make up a silly rhyme to help your child to learn it, e.g. nine sevens are sixty-three, let's have lots of chips for tea!

	1	2	3	4	5	6	7	8	9	10	11	12
1	1	2	3	4	5	6	7	8	9	10	11	12
2	2	4	6	8	10	12	14	16	18	20	22	24
3	3	6	9	12	15	18	21	24	27	30	33	36
4	4	8	12	16	20	24	28	32	36	40	44	48
5	5	10	15	20	25	30	35	40	45	50	55	60
6	6	12	18	24	30	36	42	48	54	60	66	72
7	7	14	21	28	35	42	49	56	63	70	77	84
8	8	16	24	32	40	48	56	64	72	80	88	96
9	9	18	27	36	45	54	63	72	81	90	99	108
10	10	20	30	40	50	60	70	80	90	100	110	120
11	11	22	33	44	55	66	77	88	99	110	121	132
12	12	24	36	48	60	72	84	96	108	120	132	144

Remember you have a login for Times Table Rockstars to help you learn your tables and to see how quick you can get.

https://play.ttrockstars.com/

Useful websites:

https://www.lovemaths.me/number-36

https://www.topmarks.co.uk/maths-games/7-11-years/ordering-and-sequencing

https://www.bbc.co.uk/bitesize/subjects/z826n39

https://nrich.maths.org/9122

https://urbrainy.com/maths-games/year-4-age-8-9

https://www.ictgames.com/mobilePage/index.html

http://www.crickweb.co.uk/ks2numeracy.html