Year 6 Maths Everywhere – Creative shapes

Create a drawing or painting similar to the style of this piece by the Russian artist Wassily Kandinsky who lived between 1866 and 1944.

To make your creation you could use:
- semi-circles
- squares
- rectangles
- triangles
- quadrilaterals (regular or irregular)
- lines drawn at angles including parallel lines and/or perpendicular lines.

Investigate other artists such as Piet Mondrian.
What are the similarities and differences between the shapes, angles and lines used?

Herts for Learning

Year 6 Maths Everywhere – Playing with numbers

- Draw a 8 x 8 grid and fill it with random 2-digit numbers.
- Use a dice or spinner to generate three, single-digit numbers.
- Use these three numbers and any of the four operations to make the total equal one of the 2-digit numbers displayed on the grid.

For example, after rolling 4, 5 and 6 with the dice you could then make:

- $4 \times 5 - 6 = 14$
- $(4 + 5) \times 6 = 54$
- $54 \div 6 = 9$
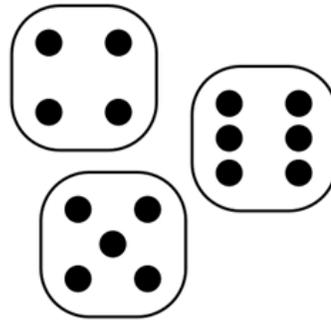
21	3	62	37	11	29	51	70
29	12	34	20	48	43	19	38
49	52	23	75	95	78	4	65
26	36	88	13	30	6	23	24
91	65	54	7	26	56	98	16
74	18	31	49	25	99	66	45
32	14	8	27	50	17	51	84
9	60	45	57	14	2	15	72

- Colour in or cross out the numbers you are able to generate.
- Try to generate as many totals on the grid as you can.
- When you have got all of the options then the dice are thrown again.
- If playing against a partner, then the first player to get four in a row wins.

Herts for Learning

Keep a record of the activities that you do every day. This could be sleeping, eating, watching TV, using the computer, playing or anything that you do in a day.

Record the amount of time that each activity takes every day during a week. This could be recorded in a list, a table, a chart or a graph, including pie charts.

Calculate the daily average (mean) for each activity during the week.
Does any of the data surprise you?

Herts
for Learning

How much does your favourite lunch cost?

Find out from someone at home or look out for the various prices when you go shopping.
If the food comes in packs of six, for example, this means that you would have to calculate the cost of one.

How much would your favourite sandwich cost if you made it yourself?

Calculate how much of your favourite food you would eat during a day, week, month or year.
How much would that cost?
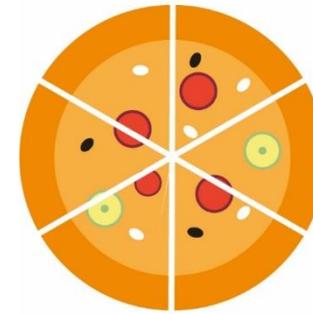
Year 6 Maths Everywhere – Fruit smoothies

Here is a recipe for a smoothie.

For every 4 cups of juice, you need 10 spoonfuls of yoghurt and 2 cups of bananas.

Scale up the recipe for more people starting with **6 cups of juice**.

Decide how many spoonfuls of yoghurt and cups of bananas will you need for the ingredients. Make sure you keep the same ratio.

What would the recipe be if we had only **half a cup of bananas** and we kept the ratio of ingredients the same?

Make up your own smoothie recipe and then work out how to scale it for more or fewer people.

Herts
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