Maths 11/05/2020

This week we are continuing our focus on angles. I have also included subtraction practice and an arithmetic test. I have included the test firstly because arithmetic methods are important to keep fresh in our minds and are used across many math areas including angles and secondly because it would have been SATs week for the year 6 children and many actually enjoyed practising the arithmetic paper. Don’t forget this is optional so please don’t make the children do a ‘test’ if you or they don’t want to!

This week I have uploaded the following worksheets,

1, Subtraction with exchanging

2, Arithmetic test

3, Missing angles- worded problems (it is only half the page!)

4, Angles around a point (\*with star questions\*, only do one set of star pages unless you feel extra enthused by it! Don’t print them all!)

5, Challenge- calculating angles in parallelograms (remember opposite angles = worth the same as each other)

Below and on the other pages, I have included some important **help** information and I have put some links to Youtube to help with the learning this week. I have also included interactive games and practical and other ideas similar to last week. I am only an email away if anything isn’t quite clear enough or for you to send pictures of your work : )

Important information to help!

* [](https://www.google.co.uk/url?sa=i&url=https%3A%2F%2Fwww.geogebra.org%2Fm%2FYZHShECf&psig=AOvVaw3hiEFIUK1dwr-jGdKRx5Jl&ust=1589201777015000&source=images&cd=vfe&ved=0CAIQjRxqFwoTCIiOlIysqekCFQAAAAAdAAAAABAI)Opposite angles = worth the same as each other

‘a’

If we only knew angle ‘a’, we could work out angle ‘b’, by calculating

180 – 120 = 60, so ‘b’ = 60˚

because both those angles are on a straight line.

‘c’ and ‘d’ are worth the same as their opposite angles.

‘d’

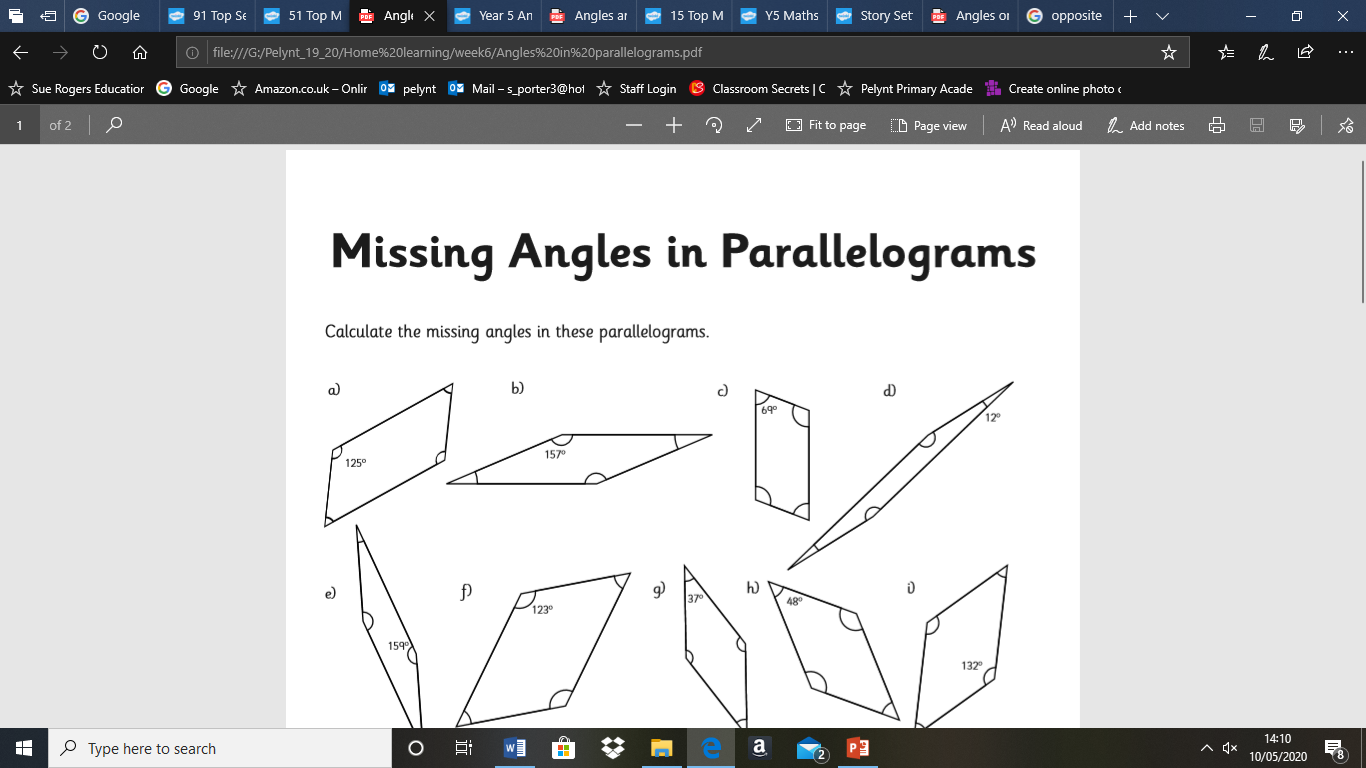
‘b’

Angles around a point add up to 360 ˚

so two straight lines (180 +180).

‘c’

* Just like any 4 sided shape (quadrilatreal), the angles inside parallelograms also equal 360˚.
* One way, you can calculate the angles in a parallelogram is by picturing ‘angle pairs’ (angles next to each other so yellow and blue) as equaling 180˚ when added together. So in the picture below ‘a’ and ‘b’ or ‘a’ and ‘d’, when added together would = 180 ˚ .



We are given 125˚ so we know the opposite angle = 125˚ as well. So ‘a’ and ‘c’ = 125˚

There are different ways to calculate ‘b’ and ‘d’,

One way is to do 180 ˚ - 125 ˚ = 55 and that equals one of your remaining angles. ‘b’ = 55˚ and therefore ‘d’ = 55˚

‘d’

‘c’

‘b’

‘a’

Youtube help

Angles on a stright line <https://www.youtube.com/watch?v=q5tV5V56Hr0>

Opposite angles around a point <https://www.youtube.com/watch?v=HifIZrowToA>

Angles in a parallelogram <https://www.youtube.com/watch?v=yhMgb_wSnEI>

Interactive games

<https://www.mathplayground.com/alienangles.html>

<https://www.topmarks.co.uk/Flash.aspx?a=activity16>

<https://mathsframe.co.uk/en/resources/resource/470/Angle-Alien-Attack>

<https://www.topmarks.co.uk/Search.aspx?q=angles>

Practical and other ideas

* Ask an adult or sibling to do the Arithmetic SATs paper and compare your scores!!
* Find sticks and layout the different types of angles or triangles.
* Draw or create some angles and quiz someone on what type of angle they are (you will need to know the answers!)
* Create a maze for family members, which you navigate with angle terminology.
* Have an angle hunt finding different angles around your house and/or garden. Think about what type of angles they are.
* Practice jumping in half and full turns. Can you jump 2 full turns? Can you work out what 2 full turns would equal in degrees?
* Make angle questions for other family members.
* Create a piece of artwork using different types of triangles and angles- try and use all types of angles and all types of triangles. You might like to do this in the style of Kandinsky (who we have been basing our artwork on in class).
* Look at (and draw if you like) a tree which you can see. Look at (and label) the angles of the branches. Estimate if the angles are acute, obtuse or reflex angles.
* I am sure you can think of lots of other interesting ways to learn about angles?! Surprise me with an idea via email : )