Hello children! Today I am playing with dice.

Will you join me?

Task 1 – Possibilities and Totals

I rolled 2 dice.

I rolled a 5 and a 6 on my dice. And when I add the 2 number the total is 11.

a. What is the **largest total** that can be made with **2 dice**, with **3 dice** and with **4 dice**?

b. What is the **smallest total** that can be made with **2 dice**, with **3 dice** and with **4 dice**?

c. What are **all the possibilities** you can get when **rolling 2 dice**?

First **estimate** the number of possibilities you think there are.

You can copy and fill in the table below to help you out.

1st 	2nd 	Total
1	1	2

d. Look at the totals, and write at least one sentence about what you notice about these totals.

For example – I noticed that there is only one total of 2.

Task 2: Dice Investigation

Resources needed for this investigation:

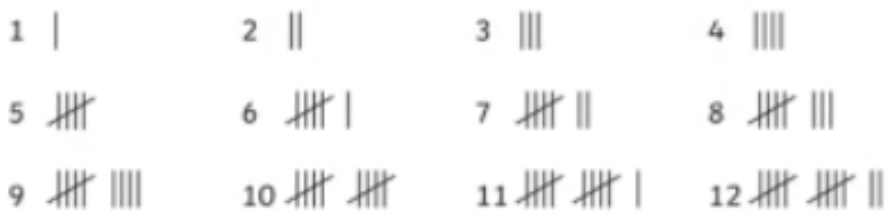
2 dice 

A copy of the below chart

Directions:

a. **Roll** both dice **60 times**.
b. Record the **total** rolled as a tally mark in the correct space in the table below(note that the table is unfinished)
   For example if a 5 and a 6 is rolled the total is 11. So I put a tally mark near the 11.

How to Tally –

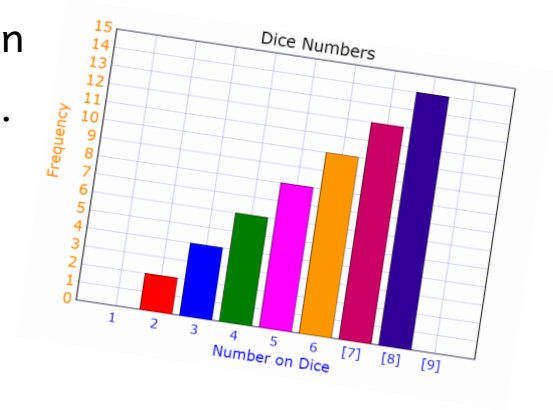


Answer	Tally	Frequency
1		
2		
3		
4		
5		
6		

Now, plot *a* **bar graph** to show your results on the page provided or on *a* squared paper. **Remember –**

a. Name your graph.

b. Think about the best scale to use.



Look carefully at your table and graph then answer the below questions:

a. Why do you think SuperM asked you to throw both dice **60 times**?

b. Which **total** was rolled **most often**?

c. Which **total** was rolled **less often**?

d. **Why** do you think these **totals** were rolled **most/less often**?

e. Do you think you will get the **same results** if you rolled the dice again for another 60 times? Try it out again. Did you get the same results?