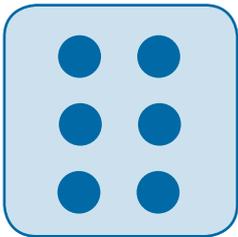




PUZZLERS

Teachers can photocopy this page to use in class

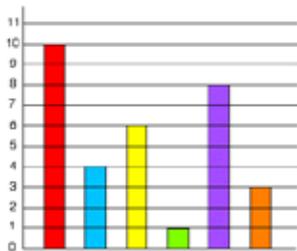


FOUNDATION YOU NEVER GET A SIX

Play a dice game where players cannot begin until they roll a six. Waiting for a six might provoke some frustration and the superstition that rolling a six is less likely than other numbers.

Suggest to students that they could investigate what we roll and see if six is less likely than other numbers. Do they think so? Do they think another number is less likely? Which number do they think will be rolled most? Why?

In pairs roll dice and colour a box or add a cube on each number 1 – 6. Roll at least ten times each. Pool the data from the class data and see (hopefully!) that each number has about the same chance of being rolled.



This is the block graph the students are making to show how many of each pet the class has altogether.

YEARS 3 AND 4 THE PET GRAPH

Tim's class has six different kinds of pets between them. The children have not yet put in the animal names under each column. Can you do this for them? There are two less cats than dogs. Only one child has a parrot at home. The number of fish added to the number of gerbils is equal to the number of dogs. There are twice as many fish as hamsters. There are half the number of gerbils as there are cats.

<http://nrich.maths.org/247/index>



YEARS 1 AND 2 WHO WILL IT BE?

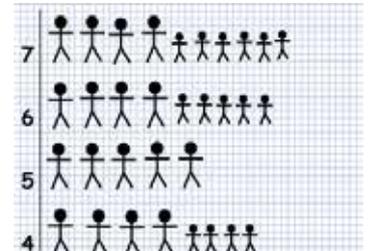
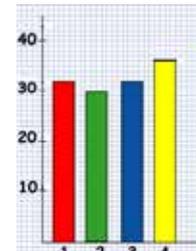
Who will be the first child in the playground at recess today?

Who will be the next person to come into our classroom?

Who is unlikely and who is likely?

Is there anyone who it is impossible to be?

What data would you collect to help you make a prediction? How much data would you need? How will you record your data?



YEARS 5 AND 6 SEVEN CLASSES

Some children made graphs to show how many children were in seven classes. Ben and Ali drew a block graph of classes 1 to 4 (left). Katie and Charlene decided to make theirs differently. They drew the graph (right) of classes 4 to 7: How many children are in each class? (Hint: look at class 4 which is represented in both graphs) How many children do the larger figures represent? How do you know?

<http://nrich.maths.org/2399/note>