

Name: _____ Date: _____

Solving problems

- Find answers to puzzles and problems

You will need:

- coloured pencils/ crayons/felt-tip pens
- 3 saucers
- 3 different fruits
- scissors
- glue

Your child has been finding answers to puzzles and problems. They may find it difficult to understand that sometimes there can be more than one correct answer to a problem. If the problem is a practical one, often there is no 'wrong' answer, only different solutions to the same problem.

Your child has been creating their own problems, based on their interests and fascinations. Continue to develop your child's mathematical interests by talking to them while they are engaged in their own play.

If your child completes a puzzle, ask them whether there might be another answer. Ask: **What could we try next? Do you think there is another way to do this puzzle? Could there be a different answer to the puzzle?** Encourage them to explore further possibilities and emphasise that 'having a go' and investigating is an important part of many activities.

1

What to do

Help your child cut out the beads from the bottom of Homework N24a. Ask your child to arrange the beads into groups of 5 so that each group has at least 1 of each type, e.g. 2 spotty and 3 plain. How many different combinations can they make? They then glue the beads onto the laces in the order they choose. Underneath each lace they write the numbers of spotty and plain beads. Encourage your child to check their answers by adding the two numbers, making sure they always total 5.

2

What to do

Provide your child with the 3 saucers and 3 types of fruit.

Place the saucers in a row and ask your child to find as many ways as they can to arrange the fruit in different orders, e.g. grape, apple, orange; orange, apple, grape etc. Can they find 6 different arrangements?

3

What to do

Ask your child to cut out the pears from the bottom of Homework N24b and place them to one side. Together, count the pears.

There are 3 trees. Ask your child to arrange the pears so that each tree has some, but they must make sure that each tree has a different number of pears – in other words, none of the trees must be the same.

Once they have arranged the pears, your child can glue them into place.

4

What to do

Together, look at Homework N24c. Explain that the pirates want to reach the treasure, but all three are scared of two particular things.

- Pirate Red will not pass Monkey Forest or the Waterfall.
- Pirate Black will not pass the Tall Trees or Snake Swamp.
- Pirate Blue will not pass Piranha Lake or the Tiger's Lair.

Help your child to find a route for each pirate, using the same colour as their name to draw in the path they take. Encourage them to find more than one way for each pirate to reach the treasure chest.

Feedback

Use this box to record any observations, comments or questions for your child's teacher.