Maths - Addition problems

This week we will be learning how to use our counting and addition skills to solve some fun problems!

Your child knows how to read, write and add 2 groups of numbers together. The following activities will help your little one to learn how to solve problems and find different ways to answer the questions.



The King and Queen need your help!

Prince Charming is having a birthday party in his (very small) Palace.

However, only 10 guests can fit in the ball room.

The King needs some help to find out which guests he can invite from

FairyTale Land to fit in the Ballroom.

The problem is they **cannot** be split up from their friends.

Can you help him work out who can come?

All children learn in different ways so please choose and adapt the activities you think will match your child from the ideas on the next few pages. The activities will range from simple addition with 2 groups, addition using pictures and then progressing to solving the King's problem. Have fun!

These are the characters from Fairy Tale Land. They must go to the party with their friends.



Activity 1 - Count the characters

- Print out the pictures of the fairy tale characters (or draw your own/ cut out some from old magazines/books).
- Have fun counting how many characters are in each group. For example- in Snow White's group there are 8 because there are the 7 dwarves and Snow White herself.
- Spend some time asking questions using maths vocabulary. Examples of such questions are -
 - "Who has the biggest group?"
 - "Who has the **least** amount of people?"
 - "Are there more in Goldilocks' group or more in Winnie the Poohs' group?"
 - "Can you count carefully?"
 - "Who has the **least** number of guests?"
- Practise writing numbers to match each group. You can use a post it note and stick it to the picture or write it on the back of each picture.

The following activities will become progressively trickier. You can start at the beginning and work your way through them all **or** choose the ones you think your child is ready to try.

Activity 2 - Adding 2 groups of practical objects

This activity is practical to enable your child to use their 1:1 counting skills to add 2 groups together. If you have any small world toys (playmobil or lego people/ cars/ animals) to use, then this would be ideal.

- Collect some cups/ Tupperware boxes/ sandwich bags which are big enough to hold the small world toys.
- Place a different amount of objects in each. Do not put more than 5 in any of the containers (so the maximum amount to add will equal 10).
- Can your child choose 2 of the containers and combine them together to find out how many there are altogether?







Point to each object and ask your child to count each group "3 add 2 makes how many altogether?"

"Now let's **count on** from 3 and **add** 2 more". Can your child put the number 3 in their brain and then point to the second group and count on "3 - 4 - 5 so 3 add 2 equals 5"

Activity 3 - Exploring pictures

The next step from practical object addition is to use pictures to represent the objects. You can use the fairy tale guest pictures or tell your own story with your own characters. There are some examples below for you to try.

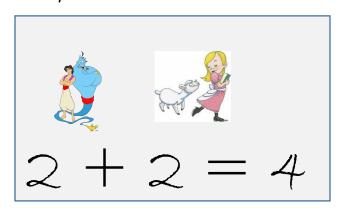
Remember! You are only adding 2 groups together at this time!

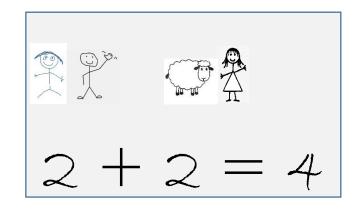
"Once upon a time there was there was a beautiful Princess who lived in a faraway land. One day she decided to have a tea party with some friends. She invited Aladdin and the Genie and Little Bo Peep and her sheep. How many friends came to her party altogether?"

Your child will choose the 2 pictures that represent each group and place next to each other (or draw your own).



Can your child write the number sentence to represent the addition using + and = symbols?





- How many different groups of guests can you combine together to practise your addition skills?
- How many different number sentences can you make?

Remember to only choose 2 groups to add together!



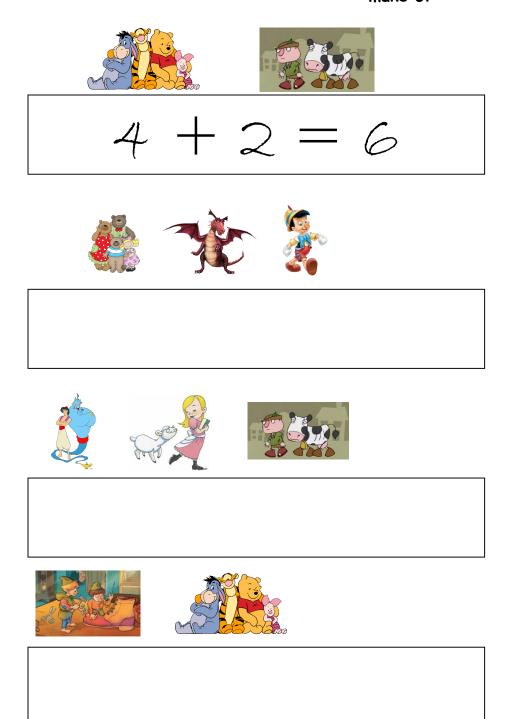
- Which 2 groups will make the most number of guests?
- Which 2 groups will add up to the least number of guests?

Activity 4 - Solving a problem

Can you work out which guests can come to the ball if there are only 6 places? You can now add more than 2 groups!

Use the pictures to help solve the problem.

Write the number sentence to show your answer. How many different ways can you make 6?



How many more ways can you solve the problem?

Activity 5 - Solving a trickier problem!

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The King and Queen need your help!

Prince Charming is having a birthday party in his (very small) Palace.



However, only **10 guests** can fit in the ball room. The King needs some help to find out which guests he can invite from Fairy Tale Land to fit in the Ballroom. The problem is they **cannot** be split up from their friends. Can you help him work out who can come?



$$4+2+1+1+2=10$$



How many more ways can you use the pictures to make a total of 10? Write down all of the number sentences you can find.



What if there was room for 12 guests? How many different ways could you solve this problem? Can you find out all of the different ways to combine the characters and add them up to make different totals (14 or 16 or 19)?

Extra activities

Have a look at the following activities for extra addition practice.

A great spaceship blasting game for quick fire addition
http://www.arcademics.com/games/alien/alien.html



• Education City is full of maths activities that your child can choose to practise their learning. There are several games in the number section which will suit all abilities.

https://www.educationcity.com/

Login: 852shirleyinfant

Password: 4935

Click on subjects/ mathematics/ eyfs/ f2 to reach the following page.



 A great selection of number games to choose from. These games are perfect if your little one is still learning to count accurately, read, write and order numbers to 10. Why not try the Teddy Game?

https://www.topmarks.co.uk/maths-games/3-5-years/counting

