

Bee-Bot Project

Session 2

Subject - Maths

Topic – Adding numbers up to a total of 50 (+1,+2)

Target group – Year1

Time – 45mins

Resources

- ✓ PowerPoint Presentation - **Session 2 Adding up to 50.pps**
- ✓ 2 Bee-Bots
- ✓ 2 transparent plastic mats
- ✓ 2 card envelopes
- ✓ 4 flash-cards
- ✓ 2 sets of cards with sums and their respective answers - **Cards for Bee-Bot Mat – Adding up to 50.pdf**
- ✓ 1 handout and worksheet – **Worksheet Adding.pdf**
- ✓ 1 TuxPaint activity – **Session2c.png**

Objectives

- Children will learn:
- ✓ To count and work out sums up to a total of 50 (+1, +2)
 - ✓ To program the bee-bot to move on the correct answer

Presentation of topic

- ✓ The session starts off with the PowerPoint presentation. The first slide shows flowers and this should help children to talk about what they can find in the countryside (flowers, bees, butterflies etc.). Billy the Bee comes in and the teacher tells children that he came to visit them once again because this time he needs their help to be able to add up numbers. Are they ready to help him?
- ✓ On the next slides, children are presented with a grid of numbers up to number 50. The grid will help children work out the sums. On screen they also have a sum and an empty box where the answer goes in.
- ✓ To achieve the answer the children have to look at their sum (example $15 + 2 =$) and then, with the help of the grid they can follow how to work out the sum.
- ✓ The animations on screen help them in the working process. The number fifteen lights up. The children are then encouraged to count on 2 boxes and to determine what number they arrive at. The number 17 then lights up. The children thus understand that the answer to the sum is 17. They can verify their answer by looking in the box where the answer should appear.
- ✓ This activity can be carried out on an interactive whiteboard too. If there is one present in class the children can come out and touch the number 15. This then lights up. They should then count on 2 boxes and touch the number 17 which lights up too. The next step is to check their answer by clicking in the answer box at the bottom of the screen.
- ✓ To stress what they have been learning so far, children are presented with a game. This time on screen there is the Bee-Bot who is waiting for the children to program him to move around a virtual mat. A child is given a flash-card on which there is a sum written. The child is also given a grid which will help him/her work out the sum.

The child's task is to work out the sum, find the answer and then look on screen and see if the Bee-Bot manages to go on that number. Obviously the teacher clicks her mouse so that the Bee-Bot can move after the child gives the answer.

- ✓ Once again, if there is an interactive whiteboard in class, instead of having the teacher clicking the mouse, the child can come out to press the arrows on the Bee-Bot so that he/she can program the Bee-Bot to go on the answer.

Group Activities

- ✓ Following the presentation of the topic, the class can be divided into groups where they will be actively engaged in various activities that can be carried out related to this topic. Activities suggested will focus on the use of the Bee-Bots. Alternative activities can also be carried out. On-screens to be worked on the classroom desktops and worksheets are also being suggested. It is recommended that the different groups rotate from one activity to another for all the children to have a chance at handling and programming the Bee-Bot. In this way children will have the opportunity to practice what they have learnt using various methods and technologies.

- Activity 1: Bee-Bot activity - ***Cards for Bee-bot Mat – Adding up to 50.pdf***

The children are presented with a mat on which they can see various numbers. They also have a packet full of cards on which they have sums to be worked out. Children have to pick up a card, look at the sum and work it out so as to get an answer and then program the Bee-Bot to reach that answer on the mat.

- Activity 2: Worksheet – ***Worksheet Adding.pdf***

The children have a handout on which they can see various sums to be worked out. They also have a grid to help them out with the sums. The children have to fill in the handout by working the sums.

- Activity 3: Onscreen – ***Session2c.png***

The children have the same task as activity 2 but this time they have to work on their class desktops. Children see an onscreen activity, created with Tux Paint, where various sums are presented to the children. The sums are missing the answer. The children are to use the Text Tool and the numbers on the keyboard to fill in the answers.

Conclusion

- ✓ To summarize what has been learnt today, children are encouraged to go back to their desks and if there's enough time they can play the game once more. This acts as a reinforcement of the concepts learnt today.