



Anston Hillcrest Primary School

Early Years Foundation Stage



Numbers and Patterns Activities to try at Home:

- Skittles

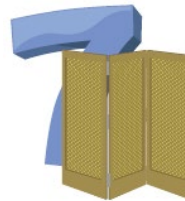
You will need: a set of skittles and some balls



Make the skills available outside. Encourage children to play skittles. Use commentary, prompts or questions to encourage them to work out their scores: *Good throw David, you knocked down more that time. How many skittles left? I wonder who scored the most in that round. How can you tell?* Taking ideas further: Provide counters and mark-making equipment such as chalk or flipchart and ask children to consider how they could keep track of who had scored most in the game.

- Number detectives

You will need: large wooden or plastic numerals or numeral cards, a screen.



Explain to children that there is a number hidden behind the screen and that they will need to look carefully to find out what it is. Slowly raise part of the number above the screen. Encourage children to talk about what they can see. Use prompts such as: *What shapes can you see so far? I wonder if this gives us any clues.*

You may wish to model descriptive language and reasoning by 'thinking aloud', for example: *I can see two straight lines (pointing to them) that are joined. I don't think it can be a number 8 because the number 8 is made up of curved lines.*

Gradually reveal more of the number and give children opportunities to say what they think now. As children become more experienced at this activity, ask them questions such as: *What numbers could it be? What couldn't it be?*

When the whole numeral is finally revealed, ask children to describe it. You may need to model descriptive language initially, for example: *The number 7 is made up of two straight lines, one short one along the top and one longer one that slopes down. Can you come and point to the two straight lines?*

- Teen Patterns

You will need: numbers 1 - 20.

Work together to make a number line. Count with the children from 10 - 20 as you point to each number of the number track. Ask them to focus on the '-teen numbers'. Use prompts such as: *Tell me some of the numbers that have '-teen' in them. How are these numbers written? Can you spot the pattern?* (They are written using a 1 and another digit).

Hold up the number 1 card. Encourage children to find the number that goes with 1 to make each of the different teen numbers. *What goes with my number to make 14, 17, 19 etc.?*

- Pit Stop

You will need: toy cars or remote control cars, number cards 1 to 10 (and beyond), chalk.



Make the equipment available outside. Invite children to make a racetrack for the cars. Give children the 1 to 10 (and beyond) cards, mixed up, and explain that on a racetrack there are pit stops, which are places drivers stop to get new tyres or fuel. Ask children to put the numeral cards as pit stop markers round the track in order.

Watch how the children do this. If necessary, offer prompts such as: *Which number do we start with when we count? Where are you going to place this number? What number should come next?* Observe and listen to the children as they play with the cars. If it will not disturb their play, you may wish to join in. Interact with children by describing the action and offering prompts such as: *I have just driven past pit stop 6. Pit stop 7 is next. I am going to stop there. What about you?* Encourage children to describe what they are doing as they play. You may wish to model the role of race commentator, then suggest that a child takes over the role.

- Squeeze and Squirt

You will need: plastic bottles numbered 1 to 10 (and beyond), squeeze bottles filled with water.



Invite children to put the numbered bottles in a line so that the numbers are in order. Observe how they do this. You may want to offer prompts such as: *One, two, three, four, five ... What number comes next?* When all the bottles have been put up, encourage the children to count along the line to check that they are in the correct order.

Show children how the water-filled squeeze bottles can be squirted to aim a jet of water that knocks over the numbered bottles. Model the use of number language to describe what you are doing, for example: *I am aiming at the end of the line at bottle 9. I've knocked over the bottle before it too - that was number 8.*

Observe children as they play. Encourage them to describe what they are doing. Use prompts such as: *Only two bottles are still standing. Which ones? Which bottle are you going to aim for next?* You might set the children challenges such as: *Who can knock over the bottle number 7? I wonder if you can knock down bottle 2 without knocking over the bottles next to it. Which bottles are these?*

Taking ideas further: Encourage children look at the shapes of the numbers and use the squirty bottles to write the numbers on the floor in water.

- Kim's Game

You will need: number cards 0 - 20



Lay the cards randomly on the ground. Tell the children that you have laid out all of the numbers 0 to 20 on the ground. Work together to check that they are all there, giving some prompts such as: *How could you use counting? Would putting the numbers in order help?*

After counting the cards, in order, together, shuffle them and ask the children to close their eyes while you remove one number. Ask children to open their eyes and look at the remaining

numbers. Suggest they work together to try and find which number is missing. Watch how children work, listening to the number language they use.

When children are ready, ask them to say what number they think you removed, before revealing it. Ask children to explain how they worked it out. You may wish to describe children's methods yourself in order to model appropriate language, for example: *I heard you counting up from 0 to 12. Then you said that you couldn't find the next number, 13, which is written with a 1 then a 3, so that must be the missing number.*

Taking ideas further: Remove two numbers at a time. Use a different sequence of numbers, for example, the numbers 8 and 13, without telling the children the range you are using, remove a number from the middle of the sequence.



- Musical Numbers

You will need: a CD player, a number track 0 - 30 chalked on the ground, with a few numbers missing.

Ask children to help you complete the number track. Use prompts and questions, such as:

- * *What number should be before 26? How do I write this number?*
- * *Can you identify other numbers that are missing?*
- * *How did you know that the number 13 belongs in this space?*

Encourage children to jump along the number track, saying the number they land on each time. Play 'musical numbers'. Explain that while the music plays they should dance around the number track. When it stops you will ask them to find a special number, for example, a number that contains the digit 2, a number that is bigger than ten, a number we say when we count in tens.

Taking ideas further: Encourage children to make up their own number statements for you to go to when the music stops.