

NRICH

Playing Incey Wincey Spider

Counting



Children enjoy playing games with dice

Adults could use this to develop connections between the number of dots on a dice and counting actions.

The Activity

Draw a giant 'drainpipe' outdoors so children direct a 'spider' who counts each jump after landing, using giant dice with dots. Children choose to be either the sun or the rain. They take it in turns to throw the dice and move the spider up or down the drainpipe according to their role.

Encouraging Mathematical thinking and reasoning.

Describing

Where are you now?

Recording

Can you put something on paper to show what numbers you threw or to show someone what you learned from the game?

Reasoning

Why did the sun win, do you think?

You've thrown two: what do you have to do now?

How many steps more have you got to go?

You've thrown three - will that get you to the end?

How many turns do you think you will need to get to the end?

What do you think will happen? Why?

Resources needed

Game board, spider or counter with a spider drawn or pasted on it, dice with 1,2,3 dots and another with numerals 1,2,3, or a mixed one (alternatively, spinners). If played outside, the track can be drawn with chalk or painted with powder paint: a spider hat for a child and large foam dice would be useful.

Additional resources

A board for play is on the next page

The Mathematical Journey

Counting:

- remembering the order of number words as they count
- synchronising saying one number word with landing on each square
- remembering the 'stopping number' so that the required number of steps are counted

Partitioning numbers:

- knowing how many more steps remain

Number recognition:

- recognising the number of dots on the dice
- associating the numeral or the number of dots with the number of jumps along the track

Relative number size:

- knowing that a bigger number means going further

More ways into the same mathematics and other resources that may be used.

You could play other games which involve tracks, like snakes and ladders, especially on large or outdoor tracks where the children jump along, counting as they land.

For less experienced children, play games where they throw the dice and fill up the track with counters, so they are counting objects, which is easier than counting moves.

You can make tracks or grids to fill up with any objects the children are interested in, or you have plenty of, like shells or coins at home.

There are many commercially produced games that involve turn taking and counting and that are valuable. Orchard Toys produce some good games

Story, song and rhyme links

Incey Wincey Spider

Incey Wincey Spider - a game for two players

Incey Wincey Spider

Climbing up the spout;

Down came the rain

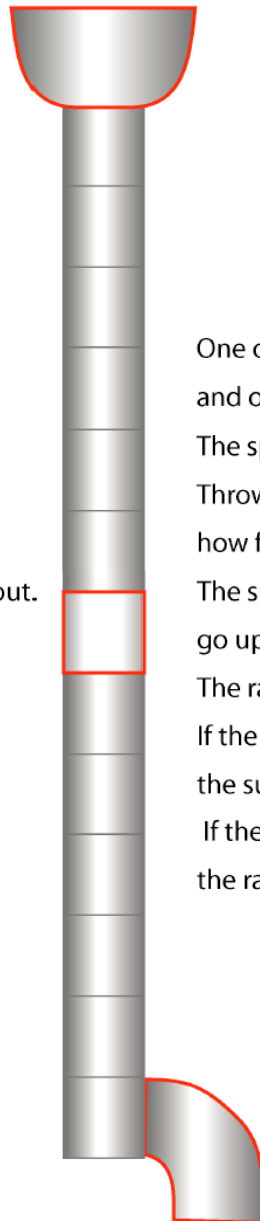
And washed the spider out.

Out came the sunshine

Dried up all the rain;

Incey Wincey Spider

Climbing up again.



One of you is the sunshine
and one of you is the rain.

The spider goes in the middle.

Throw a dice to see
how far the spider goes.

The sunshine makes the spider
go up the drain pipe.

The rain makes it go down.

If the spider gets to the top,
the sunshine wins.

If the spider gets to the bottom,
the rain wins.