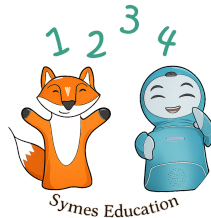


Teaching the Puppet: Early Years Maths

Teaching Card

Cardinality & Counting



Puppet Role: Novice (Pig)

Mathematical Focus: Tagging each object with one number word; understanding that the last number tells us how many

Mistakes: Missing out an object, counting an object twice, no concluding how many there are, when objects are rearranged puppet recounts them to find out how many there are.

BEFORE YOU START

Resources:

Objects of different sizes.

Puppet Introduction:

R: This is Pig. Pig has just started school, so Pig doesn't know anything. Pig will need lots of help from you, but he is excited to learn. He sometimes gets a bit worried as he think he isn't very good at maths. He is very shy, so he has to whisper. Oo Pig says: I can't wait for you to teach me!

SCRIPT

◆ **Teach the Child First**

T:
I am going to teach you something which you will then teach the puppet, so listen carefully. I am going to count the objects. 1, 2, 3, 4, 5, 6, 7,

◆ **Conservation of Number**

T: Can you teach the puppet what happens when you rearrange the objects?

C: Response

T: (Puppet whispers into R's ear) The puppet says

P: I will have to count them again!

C: Response

T: (Puppet whispers into R's ear) The puppet says

P: Nothing has changed! There is still 8.

◆ **Comparing Quantities**

T: The puppet has another pile. Can you help them decide which one has more, you or them?

P: (whispers) Mr... wants to know who has more?

C: Response

(T: The puppet says

P: Can you explain why?)

T: The puppet says

P: Thank you for helping me.

🎯 **What's Going On Here?**

8. It is important that each time you say a number, you touch an object. It is sometimes helpful to move them, so you don't count them twice. (Model this).

And if we rearrange the objects, there are the same amount there, as we haven't added or taken any away (count again to show).

◆ Child Teaches the Puppet

T: Can you now teach the puppet how to count the amount of shells that are here?

C: Response

◆ Puppet Misconceptions (Key Teaching Moments)

T: (Puppet whispers into R's ear) The puppet says

P: my turn, my turn...1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16... (puppet just keeps counting)

C: Response

T: (Puppet whispers into R's ear) The puppet says

P: 1, 2, 3, 4, 5, 6, 7 (misses an object out when counting)

C: Response

T: (Puppet whispers into R's ear) The puppet says

P: 1, 2, 3, 4, 5, 6, 7, 8, 9

C: Response

T: (Puppet whispers into R's ear) The puppet says

P: Ok, let me try again. 1, 2, 3, 4, 5, 6, 7, 8.

- The puppet deliberately makes **common counting errors**
- The child takes the role of **teacher**, strengthening understanding
- Key mathematical ideas:
 - a. One-to-one correspondence
 - b. Cardinal principle (last number = total)
 - c. Conservation of number (quantity doesn't change when rearranged)

◆ Watch For

- Does the child:
 - a. Touch each object once?
 - b. Avoid counting objects twice?
 - c. Stop counting at the correct point?
 - d. Understand that the final number represents the total?
 - e. Recognise that rearranging does not change quantity?

Using the Novice Puppet Effectively

- 'Pig' should:
 - a. Whisper / appear unsure
 - b. Make realistic mistakes
 - c. Show hesitation and lack of confidence
 - d. Respond positively when supported

