

INTRODUCTION TO INFERRING INFORMATION

1. Introduction to the idea of making an inference.

Materials: pictures or objects of associated items.

- Ask the child to add $1+2$. Talk about how the used one and the used 2 to come up with a new number, 3. Write out the problem horizontally: $1 + 2 = 3$
- Show him a picture of a cake + a candle. Write out an equation: $\text{cake} + \text{candle} = \underline{\hspace{2cm}}$. Let him figure out "birthday." Talk to him about how he added the two pieces of information together to figure out that the content was about a birthday. No one told him it was about a birthday but he could figure it out by adding the two parts together.
- Repeat the above with 10 different basic associations. If he is doing well with it, then do a few without picture support, i.e., just write out the words and read it to him.
Possible associations: $\text{milk} + \text{chocolate syrup} = \text{chocolate milk}$ / $\text{peanut butter} + \text{jelly} = \text{sandwich}$ / $\text{swing} + \text{slide} = \text{playground}$ / $\text{seats} + \text{movie} = \text{movie theater}$ / $\text{cotton candy} + \text{a ride} = \text{carnival}$ / $\text{batter} + \text{pan} = \text{cake}$ / $\text{top hat and snow} = \text{snowman}$ / $\text{pumpkin} + \text{knife} = \text{Jack-o-lantern}$ / $\text{costume and trick or treat} = \text{Halloween}$.

The object of the lesson is to emphasize how he is pulling ideas together. It is like putting together a puzzle. Each part of the equation is just a part and he can put the pieces together to come up with a new idea. Talk about $1 + 2 = 3$, you can use this as a code phrase when you want the child to draw an inference.

2. Connecting ideas to figure out the location:

Materials: pictures of the locations

- Review the concept of $1+2 = \underline{\hspace{2cm}}$ / tell them that you are going to give them clues to figure out locations. Tell them that sometimes they can add up even more than two pieces of information.
- associations are locations: $\text{slide} + \text{swing}$ / $\text{books} + \text{check out desk}$ / $\text{popcorn} + \text{many, many seats}$ / $\text{cashier} + \text{milk}$ / $\text{rides} + \text{cotton candy}$ / $\text{sand} + \text{the ocean}$ / $\text{hose} + \text{plants}$ / $\text{trees} + \text{path}$ / $\text{barber} + \text{scissors}$ / $\text{sick child} + \text{doctor}$. This content could be made easier by having pictured choices available in which the stated items are included in the pictured locations.
- ask them to generate more idea about the locations (you could talk to them about what else would you see at...) and then use their ideas to formulate the $1+2 =$

3. Connecting ideas to figure out who:

Materials: pictures of the different people

- Review the concept of $1+2 = \underline{\hspace{2cm}}$ / tell them that you are going to give them clues to figure out who we are thinking about
- associations re people: $\text{stethoscope} + \text{tongue depressor}$ / $\text{book and blackboard}$ / scissors and comb / $\text{books and checkout desk}$ / hose and helmet / $\text{badge and handcuffs}$ / mirror and drill / $\text{hard hat and jack hammer}$ / $\text{tractor and cornfield}$. This content could be supported by having choices of people, pictures with the specific associated objects offered to the child.
- Ask them to generate more ideas for different types of people and then use their ideas to formulate the $1+2 =$

4. Connecting ideas to figure out what someone is doing:

Materials: pictures of the different tasks/ videos of activities

- Review the concept of $1+2 =$ / tell them that you are going to give them clues to figure out what someone might be doing
- Associations re activities: paint and brush/ broom and dustpan/ paper towel and spray bottle/ cake mix and bowl/ chocolate syrup and milk/ bread and peanut butter/ crayons and paper/ soapy water in a pail and a dirty car/ pan and egg. This content could be made easier by having pictures of people doing the above activities. The pictures of the people should include the associated items
- go back to each association and talk about some of the other things and actions associated with the targeted situations
- write out materials that the child generates and let the other children figure out the activities

5. Connecting ideas to figure out the whole:

Materials: objects inclusive of three sets of matching items and a bag

- Review the concept of $1+2 =$ / tell them that you are going to give them clues to figure out what is on the table.
- put out three objects on the table. Have the match to one of the objects in the bag: clues: a point + eraser (pencil), round and bouncy (ball), red and juicy (apple)
- eliminate the objects on the table. Offer two clues per item: stem + petals = flower, wheels + pedals = bike, steering wheel + tires = car. Pictures of objects could be used in which the associated parts are readily seen.

6. Connecting ideas to figure out what caused a condition:

- Review the concept of $1+2 =$ tell the child that you are going to give them clues to figure out the cause for a condition
- the condition: the child pouring + a very large bottle = a wet table/ rain + dog digging = muddy floor/ child eating + a very large bag of candy = a stomach ache/ a man riding a bike + a very long steep hill = a tired man/ a hot pot + a person touching = a burnt finger. Each condition should be presented with an array of pictures from which the child could select the causes and the condition.
- Ask the child to generate more conditions and then use her ideas to formulate the $1+2 =$ resulting condition.

Note: for all of the above, the specific content might have to be altered to meet the knowledge base of the specific child. That is, a child cannot infer information if he does not know the information. As the content above is to be an introduction to learning how to reason, the content itself should be easy for the child. The content above should be used as examples and should be rewritten for the same purpose but relative to each child's knowledge base. The pictures and objects used above, supports the need to lessen the stress on a prior knowledge base.

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