

# DMT INSTITUTE

Developing Mathematical Thinking Institute (DMTI)



Professional  
Development



Curricular  
Resources



Assessment

**Jonathan Brendefur, PhD**  
[jonathan@dmtinstitute.com](mailto:jonathan@dmtinstitute.com)

# About the DMTI Targeted Activities

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These DMTI Targeted Activities modules are designed to be played or completed with a partner or in small groups. These supplement the Primary Math Assessment and DMTI curricular materials.

The activities are intended for teachers or caregivers to play with children to build necessary math skills and math language. Each activity can be played for 10 to 20 minutes. And if there are additional activities in a module, they are built to be more advanced.

# **PMA – Grade 1**

## Interpreting Context

# Interpreting Context

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## What's involved:

- Seeing quantities and operations
- Understanding what the child knows or doesn't know in the problem
- Problem solving
- Seeing patterns

## Why it matters:

- Builds critical thinking and problem solving skills
- Gives insight into what a student understands and how the student thinks
- Highlights misconceptions that may be hidden with symbolic calculations

# Interpreting Context

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## Directions for Activity I:

- Look at each picture and ask your child what they see in general and then ask what math statement they can make.
- Next, answer the set of questions that appear by clicking any key.

# Interpreting Context

## What do you see?

1. How many red apples?
2. How many yellow apples?
3. How many more yellow apples than red apples?
4. How many apples are there altogether?  
- What is a number sentence that matches this question?
5. If you were to pick nine apples, how many apples would still be on the trees?  
- What would be a number sentence that matches this question?



# Interpreting Context

## What do you see?

1. How many people are on the far side of the net?
2. How many people are on the close side of the net?
3. How many people are playing volleyball?  
- What is a number sentence that matches this question?
4. If four people leave, how many people are still playing volleyball?  
- What would be a number sentence that matches this question?





# Interpreting Context

## What do you see?

1. How many red tulips?
2. How many yellow tulips?
3. How many more red tulips than yellow tulips?
4. How many tulips are there altogether?
  - What is a number sentence that matches this question?
5. If you were to give away ten tulips, how many tulips would there be?
  - What would be a number sentence that matches this question?





# Interpreting Context

## What do you see?

1. How many boys are at the table?
2. How many girls are at the table?
3. How many more girls than boys are there?
4. How many girls and boys are their altogether?
  - What is a number sentence that matches this question?
5. If 10 people left the table, how many people would still be at the table?
  - What would be a number sentence that matches this question?



# Interpreting Context

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## What do you see?

1. How many white eggs?
2. How many brown eggs?
3. How many more brown eggs are there than white eggs?
4. How many eggs are there altogether?
  - What is a number sentence that matches this question?
5. If you were to take 2 white and 3 brown eggs, how many of eggs would be left?
  - What would be a number sentence that matches this question?



# Interpreting Context

## What do you see?

1. How many ladybugs are on the bush?
2. If 3 more ladybugs fly to the bush, how many ladybugs are on the bush now?
  - What is a number sentence that matches this question?
3. There are 14 ladybugs on the bush. If 5 ladybugs fly away, how many ladybugs are still on the bush?
  - What is a number sentence that matches this question?
4. There are 14 ladybugs on the bush. Some more ladybugs fly onto the bush. Now there are 21 ladybugs. How many ladybugs flew to the bush?
  - What would be a number sentence that matches this question?



# Interpreting Context

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## Directions for Activity II:

- Now, as you are going to school, the store, the park, or anywhere, ask your child to look for things around them and describe them with a math statement.
  - For example, “I see four birds. 1 bird is flying and the other 3 are sitting.”
- Try asking comparing questions with two different types of objects or people.





“The Developing Mathematical Thinking Institute (DMTI) is dedicated to enhancing students’ learning of mathematics by supporting educators in the implementation of research-based instructional strategies through high-quality professional development, curricular resources and assessments.”

For more information contact  
Dr. Brendefur at [jonathan@dmtinstitute.com](mailto:jonathan@dmtinstitute.com)

