



# DETECTIVE THINKING

## WHOLE CLASS

### LESSON 1

#### PURPOSE

The purpose of this lesson is to introduce the students to **deductive convergent thinking**. The students will be introduced to *Dudley the Detective* who puts his clues together to arrive at the one correct answer to the problem. The students should be made to understand that in deductive convergent thinking:

- There is one and only one right answer.
- They must find and read all the clues.
- They may not see the answer right away and need to reflect on some of the clues.
- They may need to put together many pieces of information in order to find the one right answer.
- Patience is important in not jumping to conclusions and in reflecting on clues.

#### TEACHER MATERIALS

##### For projection:

- *Dudley the Detective* picture – a colorized Dudley is available on the CD
- *Mystery Creatures*

##### For duplication:

- *Dudley the Detective* story to read aloud
  - *Mystery Creatures* story to read aloud
  - *PETS™ Behavioral Checklist – Detective Thinking*
  - picture of Dudley the Detective for each student to color
  - class set of *Mystery Creatures*
  - class set of *Who Is Mary?*
  - class set of *Which Dog Belongs To Mary?*
  - class set of detective badges, perhaps run on yellow or goldenrod paper
- pins or masking tape for the badges

#### STUDENT MATERIALS

- crayons or colored pencils
- pencils
- scissors

## LESSON PLAN



1. Introduce the lesson by asking students if they know what a *detective* is. Brainstorm with students some detectives they know and what those detectives do.
2. Tell the students that today they are going to meet Dudley the Detective who thinks in a very special way when solving problems. Project the picture of Dudley. Students may color their pictures of Dudley at this time or following the reading of the story.
3. Read the story, *Dudley the Detective*.
4. Review with students these points from the story:
  - In deductive thinking, there is only one right answer.
  - Clues must be found and then read before they can be used.
  - It is often necessary to put more than one clue together in order to find the needed information to solve the problem.
  - Patience is important when thinking about the clues. Reflecting on and delaying judgment of certain information is necessary. Avoid jumping to conclusions or relying on pre-conceived notions.
5. Help the students cut out and make detective badges, the memory trigger for this unit. Have them label the badges with their names or with a creative detective name if you prefer. The students may wear their badges while doing the deductive activities.
6. Distribute *Mystery Creatures* worksheets. While wearing their badges, have the students listen to the *Mystery Creatures* story. Following the clues outlined in the story, students should draw in the boxes on their worksheets the creatures they think are being described and label the kind of animal each one is. Remind them that these are REAL creatures and fantasy drawings should be avoided.

## CHALLENGE PAGES

*Who is Mary?*

*Which Dog Belongs to Mary?*

7. Distribute the challenge pages to students. Read the clues aloud to non-reading students as needed. If students have the reading ability, the challenge pages can be assigned as independent work. If the challenge pages are going to be used for assessing student potential, it is important that students work on them independently in class. Have students stand up folders on their desks to protect their privacy. Tell them that they are “private detectives” who may only share their work with their immediate supervisor – their teacher!



## ANSWER KEY

Mystery Creatures 1. turtle 2. owl 3. bear 4. fox

### Who Is Mary?

Name \_\_\_\_\_

**Who Is Mary?**

Dudley is looking for Mary. Use these clues to help you find Mary. Color her.

- Mary has long hair.
- Mary does **not** play with dolls.
- Mary is happy.
- Mary likes to skate.

© Pieces of Learning

### Which Dog Belongs To Mary?

Name \_\_\_\_\_

**Which Dog Belongs To Mary?**

Use these clues to help you find Mary's dog. Color it.

- Its tail is long.
- It is **not** a big dog.
- It does **not** have spots.
- Its ears are like its tail.

© Pieces of Learning

## DIAGNOSTIC NOTES

During this lesson, the teacher and observer will be looking for students who display specific characteristics. These students will then be invited to the small group sessions for additional activities. Some teachers explain the structure of the PETS™ curriculum to the students before actually starting the lessons. During the explanation, the teacher might point out to students the importance of volunteering during the lessons. This is the main opportunity for the teachers to know what students are thinking and students need to share their thoughts.

Characteristic behaviors and responses are listed on the PETS™ behavioral checklists, one checklist for each of the six units. There is an overlap of characteristics among the units. The following is a short summary of what student behaviors and responses to note during the Detective Thinking unit.

**GRASPS CONCEPTS QUICKLY** – Look for students who quickly understand and use the process of elimination. List the students who are the first to figure out the correct answers.

**SEES INTERRELATIONSHIP OF CLUES** – Look for students who build one clue's information on a previous clue to deduce the answer.

**DRAWS RELATIONSHIPS BETWEEN THE LESSON AND OUTSIDE INFORMATION** – Look for students who exhibit knowledge from outside the classroom and use it as an additional clue in solving the puzzle. After the lesson is over, students should be noted who see the relationship between thinking like detectives and other classroom activities.

**DEFERS JUDGMENT** – Look for students who wait until they have figured out the correct answer. These students avoid guessing until they determine the correct answer.



**SEES ANSWERS INTUITIVELY** – Some students who are excellent convergent thinkers are unable to verbalize how they figured out the answer. Note students when this occurs.

**IS TENACIOUS** – In addition to watching for students who work diligently to the end of the activities, note students who want to work on convergent-type activities. An enthusiasm towards this type of problem often indicates an ability to solve these problems.

**RETAINS INFORMATION** – When reviewing ideas from earlier lessons, look for students who clearly recall the concepts and then effectively apply them to the current lesson's activities. While many children may grasp concepts "in the moment" of the instructional lesson, these students exhibit the significant ability to retain and apply new learning across time.

***Who Is Mary? and Which Dog Belongs To Mary?***

Look for students who:

- solve the puzzles correctly.

**NOTES**