

# Critical thinking and problem solving

**Mathseeds** encourages children to solve problems and use higher level thinking throughout the program. These critical thinking and problem solving worksheets provide a growing toolkit of different strategies, using a simple structure that helps children grow in skills and confidence. The more experience children have with higher-level thinking, the more confidence they will gain to think logically, take risks, ask questions and apply reason. In turn, this will encourage them to communicate, explain and justify their mathematical reasoning.

Children should tackle each problem using this simple structure.

#### I. Read the question

Encourage children to read the question carefully.

#### 2. Underline the question

What is the question asking them to do? In turn, children can ask their own questions such as: Is this an addition problem? Do I need to draw a shape? Am I being asked to measure something?

### 3. Circle the facts

Focus on the important facts needed to solve the problem. These might be numbers, words or phrases that are key to understanding and interpreting the problem.

### 4. Use a strategy to solve the problem

Many of these activities will guide children in the use of a specific strategy. Some activities are openended where children will need to choose a strategy.

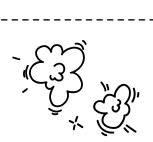
## 5. Evaluate

Encourage children to think about how they solved the problem; to check their answer and to share their solutions with a partner. Consider other ways or strategies they could have used to find a solution. This encourages children to reflect, to analyse, to ask questions and to explore alternate options.

( Lesson 38 • Popcorn

The strategy used in this lesson is:

# Draw a diagram

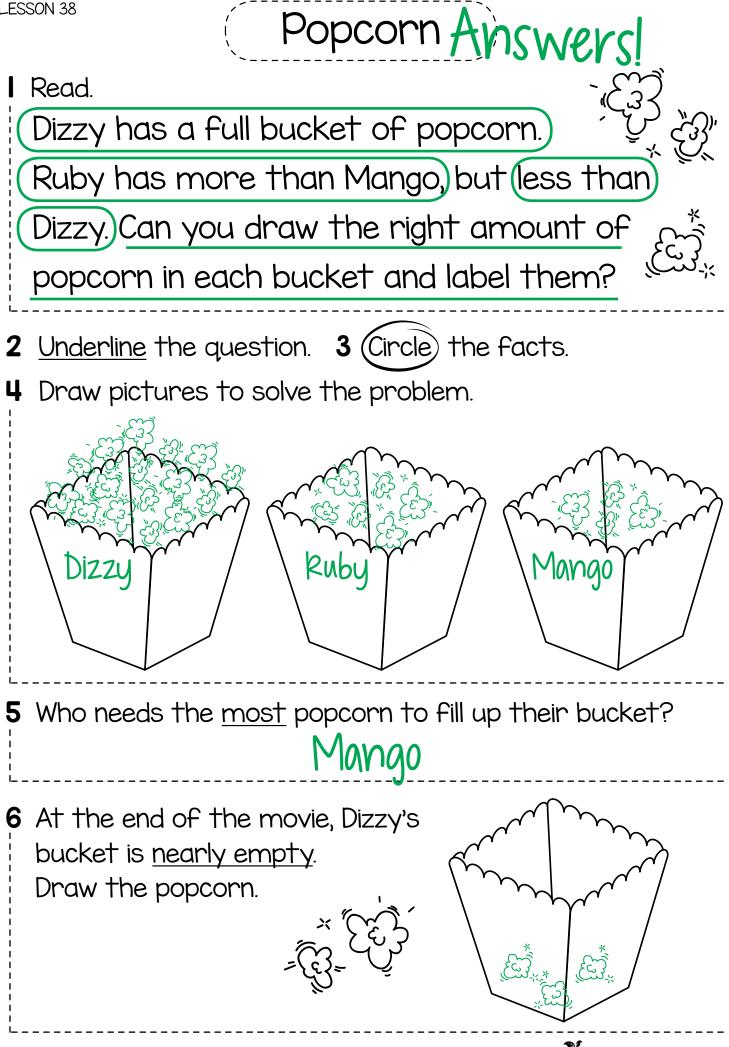


Drawing a picture helps to clearly visualise the problem. It allows children to break

the information into more manageable steps.

Children will need pencils or crayons.

Mathseed's @ Blake eLearning



Mathseed's @ Blake eLearning