

Cambridge Primary Mathematics 0096 · Stage 3

CM3-B6

Bad Luck Brad

Sp Probability · A 30-minute lesson with a 15-minute short version.

Learning intention

For learners

We are learning to describe events as will happen, will not happen or might happen.

Success criteria

- I can show chance with objects.
- I can draw or diagram the same maths.
- I can record my answer and explain how the story supports it.
- I can use TWM.03 while I work.

Learning objectives

3Sp.01

Describe events as will happen, will not happen or might happen.

TWM.03

Conjecturing: form a maths question or idea to test.

30-minute lesson

Governed source lesson: Lots of One Kind, Only Two of the Other · Concept · Deciding which kind you are more likely to draw by seeing which kind there is more of

1

Find the maths in the story

4 min**3Sp.01**

Read-along: Listen with highlighting and pause at the passage used by “Lots of One Kind, Only Two of the Other”.

Teacher: Listen to the label on the bag, and then to what Brad counts a moment after it is shaken. Say which kind of bar there were lots of and which kind there were only two of. Hold up two fingers for the chocolate chip bars, then open and close both hands for the lemon lime ones.

Learners: Notice the story evidence and say the maths question in their own words.

2

Model it with objects

5 min**3Sp.01**

Read-along: Replay the source passage while building the quantities, shapes or measures it supplies.

Teacher: Drop two red counters into the bag for the two chocolate chip bars, then a big handful of blue ones for the lemon lime bars, and shake it. Before anybody reaches in, both partners point at the colour they think will come out and say out loud why they picked it. No looking inside.

Learners: Build a concrete model and check that each part matches the read-along.

3

Try the concrete task

6 min

3Sp.01

Read-along: Keep the relevant story page visible as the class tests the model.

Teacher: Draw in the book's order: Lauren first, then Adam, then Brad. Reach in without looking, take one counter, keep it, and lay it on that name card. When all three cards have a counter on them, look along the row and say how many of the three are red.

Learners: Change or compare the objects, then explain what stayed the same and what changed.

4

Draw the maths

5 min

3Sp.01

Read-along: Return to the same story evidence before learners make a pictorial record.

Teacher: Model a clear drawing, diagram or mark for the concrete work without adding a quantity the story does not supply.

Learners: Draw the model and label the important parts with maths language.

5

Record and solve

6 min

3Sp.01

Read-along: Use the read-along once more as the evidence check for the abstract record.

Teacher: Pour the bag out and look at the two piles. Finish the sentence aloud for your partner: there were more blue, so blue was more likely to come out. Then listen to what Brad thought and what he got, and say whether the bag was against him or just fuller of one kind.

Learners: Record the result with suitable numbers, words or symbols and link it back to the picture.

6

Reflect and convince

4 min

TWM.03

Read-along: Show the source passage and invite a final evidence-based check.

Teacher: Name the Thinking and Working Mathematically focus: Conjecturing: form a maths question or idea to test.

Learners: Use the concrete model, drawing and record together to justify the answer.

Read-along routes

Shared maths question

How does Bad Luck Brad help us explore chance?

Evidence required

Show the story evidence, a concrete model, a pictorial record and a matching abstract record.

Solo

Read independently, pause at the named source passage and complete the shared maths model.

Supported

Read with the audio and use the teacher's pause points, objects and response frame.

Listening

Listen with the text highlighted, build the same model and give the explanation orally.

Assessment check

The learner meets 3Sp.01 by showing and explaining the objective through the story model. Evidence for TWM.03 is visible when the learner demonstrates this Thinking and Working Mathematically focus: Conjecturing: form a maths question or idea to test.

15-minute short version

1

Story question

4 min**3Sp.01**

Read-along: Listen to the passage used by “Lots of One Kind, Only Two of the Other”.

Teacher: Listen to the label on the bag, and then to what Brad counts a moment after it is shaken. Say which kind of bar there were lots of and which kind there were only two of. Hold up two fingers for the chocolate chip bars, then open and close both hands for the lemon lime ones.

Learners: Name the maths question and the story evidence.

2

Build, draw and record

7 min**3Sp.01**

Read-along: Replay the evidence while learners move from objects to a drawing and a record.

Teacher: Drop two red counters into the bag for the two chocolate chip bars, then a big handful of blue ones for the lemon lime bars, and shake it. Before anybody reaches in, both partners point at the colour they think will come out and say out loud why they picked it. No looking inside.

Learners: Make one concrete model, draw it and add numbers, words or symbols.

3

Check and explain

4 min

TWM.03

Read-along: Return to the source page for the final check.

Teacher: Ask learners to demonstrate: Conjecturing: form a maths question or idea to test.

Learners: Explain why the model answers the story question.

Learner activity

Concrete, pictorial, abstract: Chance

Use the read-along evidence for every part. Do not add a number or measure that the story does not give.

1. Build the story maths with objects.

2. Draw the same model and label its important parts.

3. Record the result with suitable numbers, words or symbols.

4. Explain how your evidence uses TWM.03.
