

BUDDY GAMES DAY

What are the chances?

Year 6 Mathematics · Statistics and Probability

OUR INQUIRY QUESTION

**How can we use chance and data
to design, run and honestly evaluate
a Games Day for our Prep buddies?**

ZONE 1

Lessons 1–3

WHERE DOES IT SIT?

cut along this line

Zone 1 header — print A3 landscape, cut on the line. Finished size 420 × 140 mm, which is the full column width.

ZONE 2

Lessons 2–3

WHERE THE NUMBER COMES FROM

cut along this line

Zone 2 header — print A3 landscape, cut on the line. Finished size 420 × 140 mm, which is the full column width.

ZONE 3

Lessons 4–6

EXPECTED OR OBSERVED?

cut along this line

Zone 3 header — print A3 landscape, cut on the line. Finished size 420 × 140 mm, which is the full column width.

ZONE 4

Lessons 7–10

BUDDY GAMES DAY

cut along this line

Zone 4 header — print A3 landscape, cut on the line. Finished size 420 × 140 mm, which is the full column width.

ZONE 5

Lessons 11–15

WHAT THE DATA REALLY SAYS

cut along this line

Zone 5 header — print A3 landscape, cut on the line. Finished size 420 × 140 mm, which is the full column width.

BIG IDEA

**A probability is a number between 0 and 1.
Nothing sits outside it.**

BIG IDEA

**The bottom number counts everything
that could happen. The top number
counts the ones you want.**

BIG IDEA

**Expected is calculated.
Observed is counted.
They are almost never equal.**

BIG IDEA

**We put our mathematics to work
for our Prep buddies.**

BIG IDEA

**A graph can be accurate
and still be misleading.**

mount student work here (A4 work)

NAME _____

WHAT I WORKED OUT



mount student work here (A5 work)

NAME _____

WHAT I WORKED OUT

THE QUESTION WE LEFT OPEN

**Why doesn't what we spin
match what we calculated?**

Asked in Lesson 2. Lift to find out.

Cut here. Tape the TOP edge only, so the card lifts.

WHAT WE FOUND OUT

Twenty spins is a small sample.
The more trials we ran, the closer the
fraction got to the probability — even
though the raw difference got bigger.

Add the class's own words here after Lesson 6.

WORD WALL

probability

students write the meaning here

WORD WALL

outcome

students write the meaning here

WORD WALL

sample space

students write the meaning here

WORD WALL

impossible

students write the meaning here

WORD WALL

certain

students write the meaning here

WORD WALL

even chance

students write the meaning here

WORD WALL

trial

students write the meaning here

WORD WALL

frequency

students write the meaning here

WORD WALL

expected

students write the meaning here

WORD WALL

observed

students write the meaning here

WORD WALL

variation

students write the meaning here

WORD WALL

distribution

students write the meaning here

WORD WALL

mode

students write the meaning here

WORD WALL

range

students write the meaning here

WORD WALL

skewed

students write the meaning here

WORD WALL

misleading

students write the meaning here

Lesson roundels

Cut out and pin beside the work from that lesson, so the board reads as a journey.

LESSON

1

LESSON

2

LESSON

3

LESSON

4

LESSON

5

LESSON

6

LESSON

7

LESSON

8

LESSON

9

LESSON

10

LESSON

11

LESSON

12

LESSON

13

LESSON

14

LESSON

15