

Part B · Statistics

This is the second half of your folio. Your teacher marks it together with the Part A you did last term.

Name		Class		Date	
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All the data you need is printed in this booklet. You work on your own. You may use a ruler, a calculator and the conversion mat. You may not use your worksheets from Lessons 9 to 12, or your classmates.

There are six items. B1 to B5 are about the data. B6 is a poster to critique, and it is the one to leave about ten minutes for.

The data

Two more stalls ran at the Riverbend Buddy Games Day. Twenty Prep buddies visited each one. These are brand new stalls — you have not seen this data before.

Stall	What the buddy did
The Ring Toss	Threw three rings at a post from two metres away.
The Bean Bag Throw	Threw four bean bags into a bucket.

How much they liked it

SF
B1

The Preps gave each stall a score from 1 to 4. Write what type of data this is, then give the mode and the range for each stall.

Score	Ring Toss	Bean Bag
1	2	1
2	4	3
3	8	6
4	6	10
Preps altogether	20	20

The three types you have met are: ordinal categorical (an order, like 1 to 4), discrete numerical (counted), continuous numerical (measured).

	Type of data	Mode	Range
Ring Toss			
Bean Bag			

Mode = the score given most often. Range = biggest score minus smallest score.

Prizes won

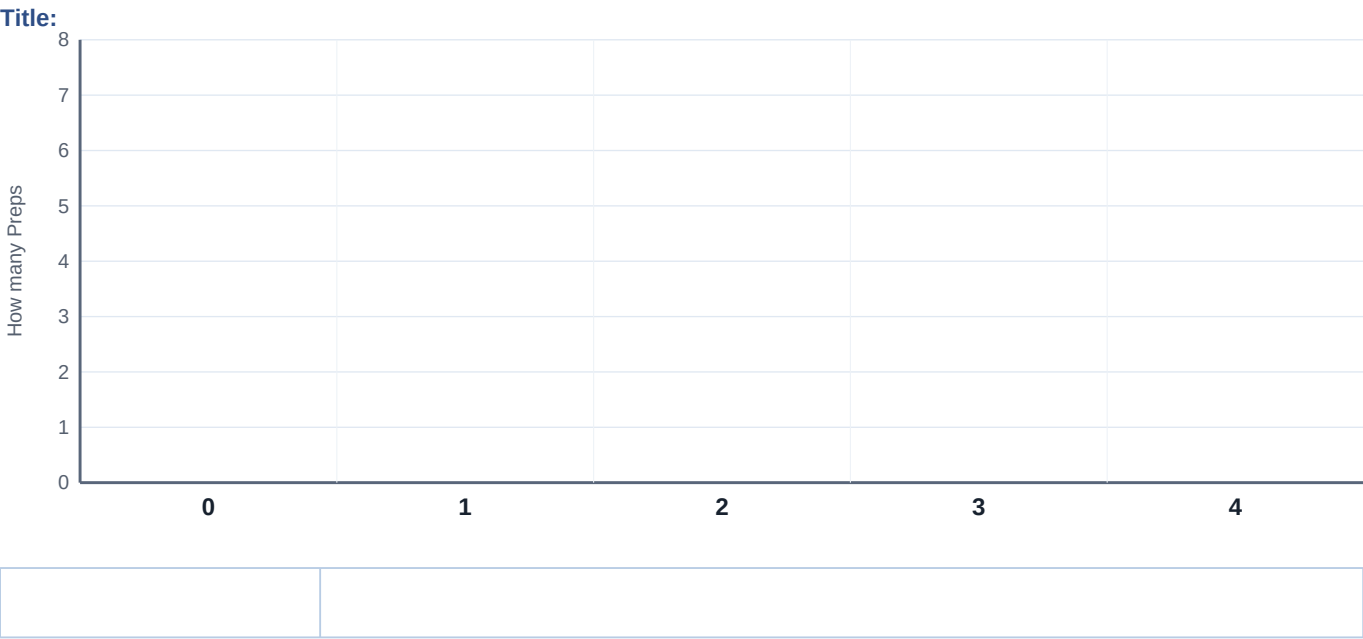
CF
B2

Each Prep had four turns. Choose ONE stall and build a display of its prizes. Give it a title and label both axes. Then write its mode.

Prizes won	Ring Toss	Bean Bag
0	1	6
1	4	7
2	7	4
3	5	2
4	3	1
Preps altogether	20	20

The stall I chose: _____

This is counted data, so draw a bar chart with a gap between the bars. The numbers up the side must start at 0.



Comparing how much they liked the two stalls

CF
B3

Compare the two stalls using the B1 data. Name the feature that is different, give its value for both stalls, and say what that tells you about the Preps.

Check all three: is the mode different? Is the range different? Is the shape different? Write about the one that IS different.

Feature	Ring Toss	Bean Bag	Same or different?
Mode			
Range			

MY COMPARISON — THE FEATURE, BOTH VALUES, AND WHAT IT MEANS

Starter: The _____ for the _____ was _____ and for the _____ it was _____ , which tells me that _____ .

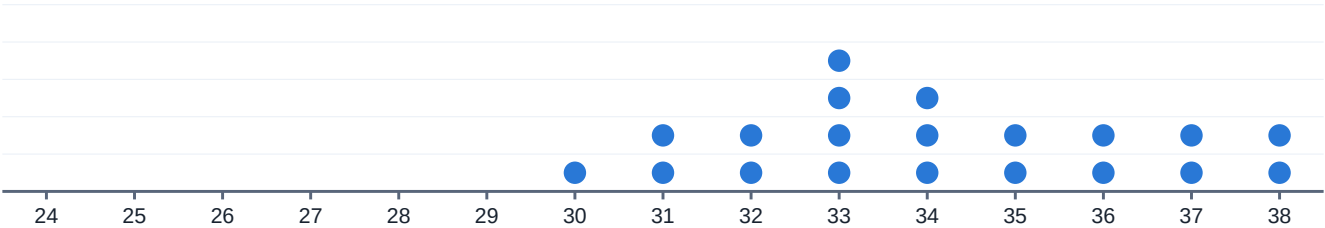
How long a turn took

CF
B4

The Ring Toss times are plotted for you. Plot the Bean Bag Throw times on the line underneath, then compare the two sets.

Both lines run from 24 to 38, so you can compare them by looking.

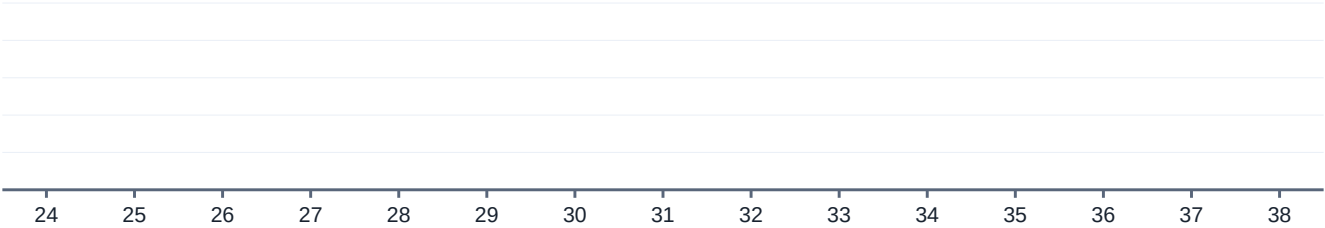
The Ring Toss — done for you



The Bean Bag Throw times, in seconds:

24 25 25 26 26 27 27 28 28 28 28 29 29 30 31 33 35 36 37 38

The Bean Bag Throw — your turn



	Mode	Range
Ring Toss		
Bean Bag		

MY COMPARISON — THERE ARE TWO THINGS TO SAY HERE

One sentence about which stall was quicker. One sentence about which stall was more spread out. They are two different findings.

Is the claim true?

CU
B5

A Year 6 student says: "The Ring Toss was better than the Bean Bag Throw in every way." Use the data to decide whether that is supported. You must use evidence from at least two of the three sets of data.

You have three sets to check: how much they liked it (B1), prizes won (B2), and how long a turn took (B4). Go through them one at a time and write down who wins each one.

What we measured	Which stall comes out better?	How I know
How much they liked it		
Prizes won		
How long a turn took		

IS THE CLAIM SUPPORTED? ANSWER YES OR NO, AND SAY WHY

Starter: The claim is _____ because the Ring Toss was better at _____ , but the Bean Bag Throw was better at _____ .

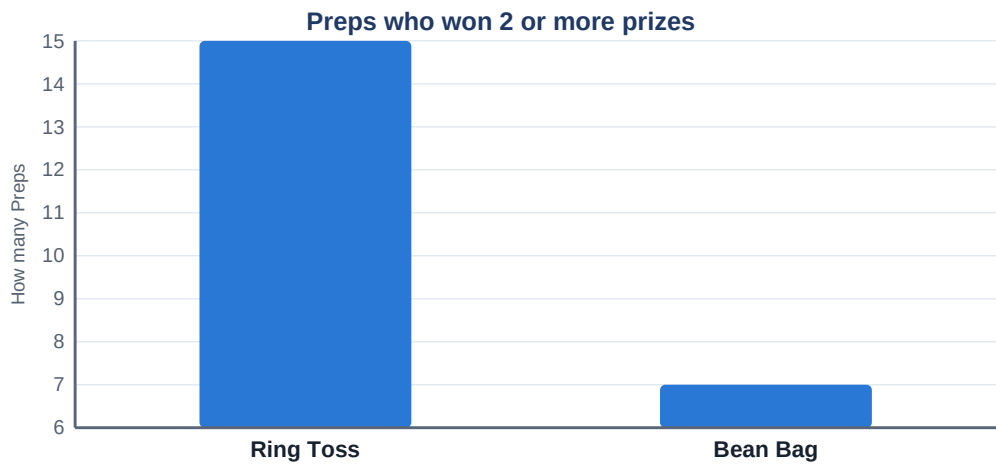
The poster

CU
B6

The Ring Toss team made this poster. Critique it.

9 TIMES MORE PREPS WON BIG AT OURS!

The Ring Toss · Riverbend Buddy Games Day



"We asked the Preps standing in our queue and nearly all of them said we were the best stall at Games Day."

Start with the numbers up the side of the chart. Where do they start? Then check the real numbers against the B2 table.

What is wrong with it	What it makes a reader believe	What the data really shows

WRITE AN HONEST HEADLINE FOR THIS POSTER

Before you hand it up

Tick each one. If you cannot tick it, go back.

☐	B1 has a data type, a mode and a range for BOTH stalls.
☐	My B2 display has a title, both axes labelled, and starts at 0.
☐	My B3 answer names ONE feature and gives its value for both stalls.
☐	My B4 dot plot has 20 dots on it.
☐	My B4 comparison says something about speed AND something about spread.
☐	My B5 answer uses at least two of the three sets of data.
☐	My B6 answer says what the poster makes a reader believe, not just what is wrong.
☐	My name is on this booklet and on my Part A.
☐	