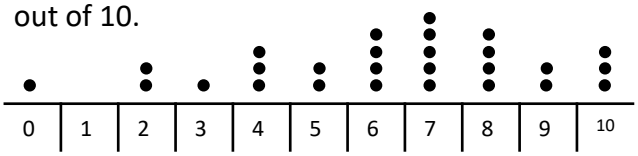
Interpreting Statistical and Chance Situations – Set 3

(A) They identify whether an outcome is more likely by systematically recording the results of chance experiments.

Correct example:

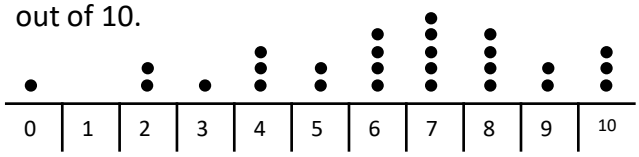
Dot Plot

How many balls can Room 7 get in the bucket out of 10.



Incorrect example 1: Incorrect conclusion

How many balls can Room 7 get in the bucket out of 10.

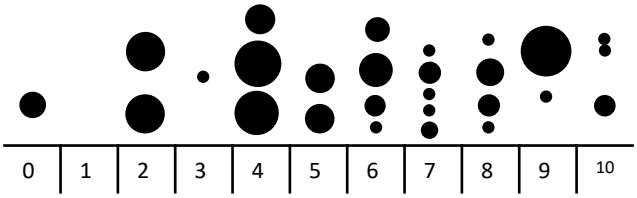


Silly Simon says: "most students got 7 balls in."

E.g. What is wrong with this statement or display?
I think it is well displayed as it shows everything well, but the statement is incorrect. More students got 7 balls in than any other number. But only 5 kids got 7 balls in which is not most of the whole class. When counting the rest I can see 22 kids got different amounts in.

Incorrect example 2: Spacing and Size

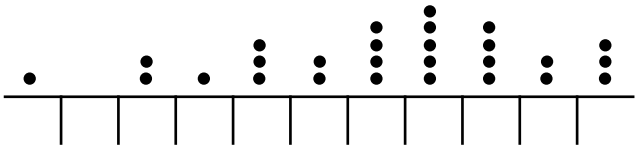
How many balls can Room 7 get in the bucket out of 10.



Students recognize if data is shown has varied sized objects or inequal spacing it can be hard to read or give misleading results.

E.g. What is wrong with this statement or display?
When I first look it looks like getting 4 balls in the bucket was the most because they were drawn the biggest. The dots are all sorts of sizes, so it is hard to read.

Incorrect example 3: No heading / labels



Students know that if a graph or data display is missing a title or labels it can be misinterpreted.

E.g. What is wrong with this statement or display?
I don't know what it is about as it has no title or labels; it could be about ice cream or cars or anything.

(P) They identify whether an outcome is more likely by systematically recording the results of chance experiments.

Example

I am more likely to pull out a picture card (king, queen, jack) than a number card.

	Tally	Frequency
No picture	𝍸𝍸𝍸𝍸	21
Picture	𝍸	9

Can collect data to prove / disprove statement

I pulled randomly shuffled the deck and pulled 1 card out, I did this 30 times. Only 9 times did I pulled out a picture while I pulled out no picture 21 times so this proves this statement is incorrect.

Can analyse collected results to predict future results

If I pulled another 30 cards out, I might not get the same results because it was random, but I think I will still get less picture cards than non picture cards, because I had more than 2 times more non picture cards pulled out.

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