Catch 100

Irish Heart Foundation
The National Stroke & Heart Charity

Curriculum Links:

Maths - **Strand:** Number **Strand Unit:** Fractions/Decimals and percentages

Maths - **Strand**: Data **Strand Unit:** Representing and interpreting data

PE - **Strand**: Games **Strand Unit:** Sending, receiving and travelling (Ball handling)

Overview

This activity is based on the Catch 100 activity on page 33 of the Bizzy Breaks booklet. Pupils are asked to record how many times they catch or drop a paper ball using 10 different throwing/catching patterns and plot the results on a bar chart.

Learning Outcomes:

Through this activity, pupils will use mathematical skills of applying and problem solving in the context of a game. Pupils will collect data, present their data on a bar chart and calculate percentages and fractions from their results.

Teaching Notes:

Give each pupil a *Catch 100 Record Sheet.* Pupils can complete the activity individually or in pairs in their pods (with one pupil throwing/catching while the other records the outcome for each throw, then swapping roles).

Eight different throwing and catching patterns are suggested in the Bizzy Breaks activity; encourage pupils to come up with some of their own to achieve the 10 different rounds. Ideas to suggest for this could include 'hop once before catching', 'dab before catching', 'touch knee before catching' etc.

When pupils have completed 10 rounds of 10 throws and catches, distribute the *Catch 100 Bar Chart* and ask pupils to use their results to fill in the bar chart. Pupils could also find the mean, median and mode for the whole class.

An *Additional Questions* sheet is included on the last page that can be used for class discussion or individual work.

Differentiation

The different worksheets can be introduced step by step, or given to pupils as a set of progressive worksheets, allowing pupils to complete the steps at their own pace.
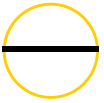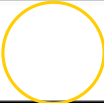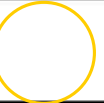
Instructions for Pupils
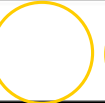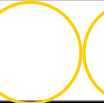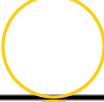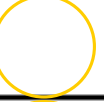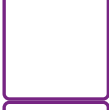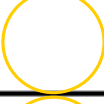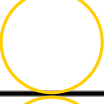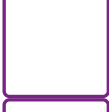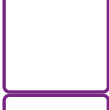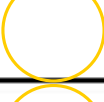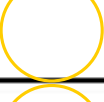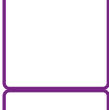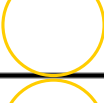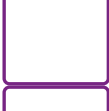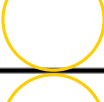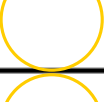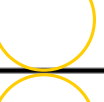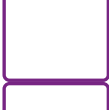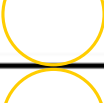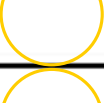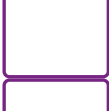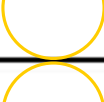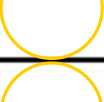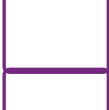
Step 1   For each type of throw and catch, fill in a description of your chosen pattern (e.g. "clap once").

Step 2   Every time you throw with this pattern, use the circles to mark the outcome of each attempt (an 'x' in the circle for caught and a '-' in the circle for not caught).
This can also be done with a partner taking turns; one person completes 10 throws while the partner keeps a record of how many are caught or not caught, then swap over.

Step 3   After each 10 throws, or after all 10 rounds, add up the total number that were caught using this pattern.

Step 4   Use the results to fill in the bar chart by shading the total number caught for each pattern.

Catch 100 Record Sheet

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Caught = ⊗
Not caught = ⊝

Pattern number	Description of pattern	1	2	3	4	5	6	7	8	9	10	TOTAL
1		○	○	○	○	○	○	○	○	○	○	
2		○	○	○	○	○	○	○	○	○	○	
3		○	○	○	○	○	○	○	○	○	○	
4		○	○	○	○	○	○	○	○	○	○	
5		○	○	○	○	○	○	○	○	○	○	
6		○	○	○	○	○	○	○	○	○	○	
7		○	○	○	○	○	○	○	○	○	○	
8		○	○	○	○	○	○	○	○	○	○	
9		○	○	○	○	○	○	○	○	○	○	
10		○	○	○	○	○	○	○	○	○	○	

Catch 100 Bar Chart

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Using your total number caught for each pattern, fill in the bar chart below

Total number caught

10
9
8
7
6
5
4
3
2
1

1 2 3 4 5 6 7 8 9 10

Pattern number
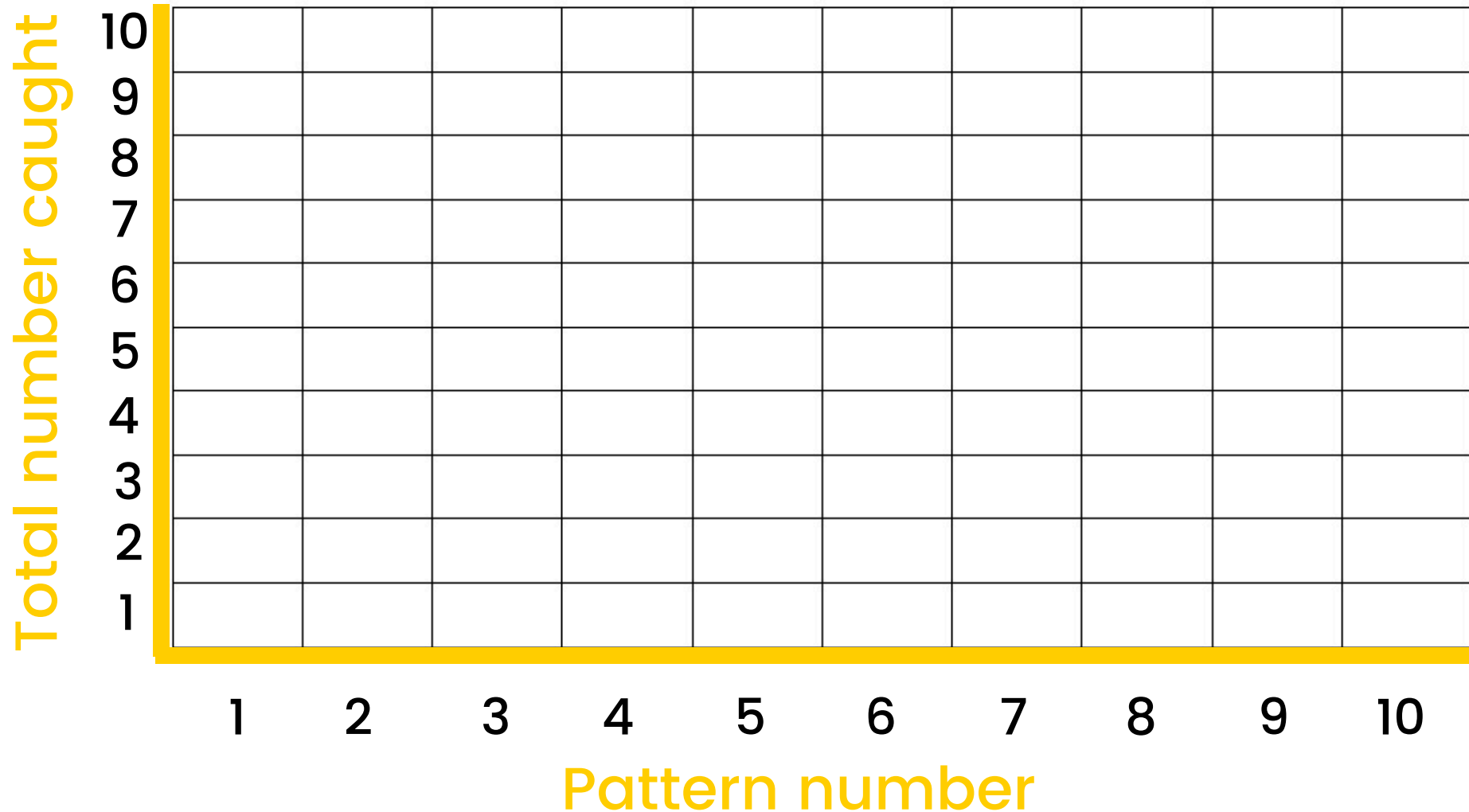
Additional Questions

1. How many catches were there in total for all 100 attempts?

2. What fraction of the throws were caught/not caught for each of the 10 patterns?

3. What fraction of the throws were caught/not caught in total for all 100?

4. What percentage of the throws were caught/not caught for each of the 10 patterns?

5. What percentage of the throws were caught/not caught in total for all 100?

6. Rank the throwing patterns in order from most caught to least caught.

7. What was the mean/median/mode number of catches per pattern/overall?