📊 Class 3 Data Handling Worksheet

By Thinking Juggernaut

Name: _____ **Date:** _____ **Total Questions:** 24

🌟 What is Data Handling?

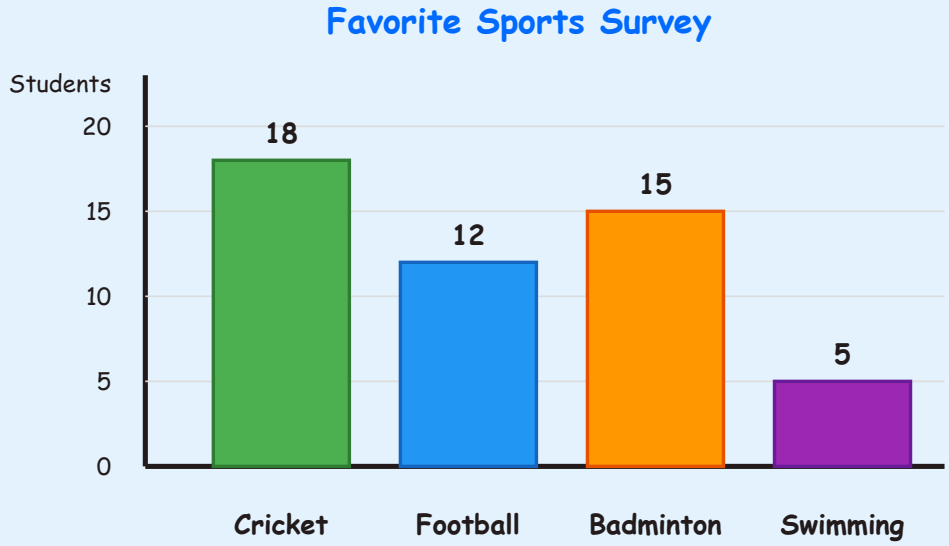
Data Handling is the process of collecting, organizing, and representing information in different ways to understand it better and make decisions!

In Class 3, we learn:

- **Tally Marks:** We group by 5s. Four vertical lines with the 5th line crossing diagonally = 5
- **Pictographs:** Pictures represent data. Sometimes 1 picture = multiple items (like 1 🍎 = 2 apples)
- **Bar Graphs:** Bars of different heights help us compare quantities easily
- **Tables:** Data organized in rows and columns for easy reading
- **Data Interpretation:** Reading and understanding what data tells us

📝 Sample Problem with Bar Graph

A school conducted a survey about favorite sports among 50 students:



Reading the Bar Graph:

- The **height of each bar** shows the number of students
- Cricket is most popular with **18 students**
- Swimming is least popular with **5 students**
- Total students surveyed: 18 + 12 + 15 + 5 = **50 students**
- Difference between Cricket and Football: 18 - 12 = **6 students**

Part A: Warm-up Questions ☀️

⭐ Easy

Q1. Count the tally marks and write the number:

𝍸 𝍸 𝍸 𝍸

Answer: _____

Q2. Look at the pictograph. Each 🌺 represents 2 flowers:

Flowers in the garden:

Red: 🌺🌺🌺🌺

Yellow: 🌺🌺🌺

Note: Each 🌺 = 2 flowers

a) How many red flowers are there?

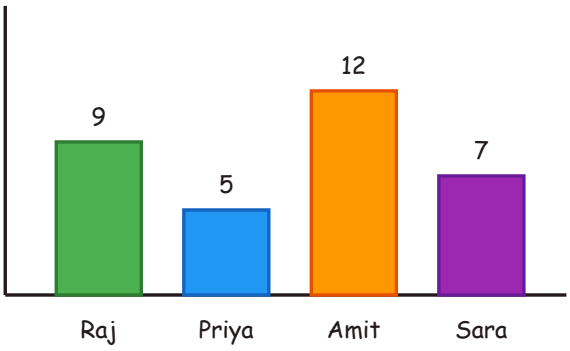
b) How many yellow flowers are there?

Q3. Complete the table based on the information:

Ananya has 12 pencils, 8 erasers, and 15 crayons.

Item	Number
Pencils	_____
Erasers	_____
Crayons	_____

Q4. Look at the simple bar graph showing books read by 4 friends:



Who read the most books?

Answer: _____

Q5. Write 17 in tally marks:

Q6. **True or False:** In a bar graph, the taller the bar, the greater the quantity.

Answer: _____

Q7. A pictograph shows: 🍕 🍕 🍕 (Each pizza = 3 slices)

How many slices in total?

Answer: _____

Q8. Complete: Data collected and organized in rows and columns is called a _____.

Answer: _____

Part B: Practice Questions 📚

⭐⭐ Medium

Q9. A shopkeeper recorded sales using tally marks:

Monday: 𝍸 𝍸 𝍸

Tuesday: 𝍸 𝍸 𝍸 ||

a) How many items sold on Monday?
b) How many items sold on Tuesday?
c) How many more items sold on Tuesday than Monday?

Q10. Study the table showing temperature (in °C) for a week:

Day	Temperature (°C)
Monday	28
Tuesday	32
Wednesday	30
Thursday	35
Friday	29

a) Which day was the hottest?
b) Which day was the coolest?
c) What is the difference between the hottest and coolest days?

Q11. A pictograph shows favorite ice cream flavors. Each 🍦 = 4 children:

Chocolate: 🍦 🍦 🍦 🍦 🍦

Vanilla: 🍦 🍦 🍦

Strawberry: 🍦 🍦 🍦 🍦

Note: Each 🍦 = 4 children

a) How many children like chocolate?

b) How many children like vanilla?

c) Which flavor is least popular?

Q12. Draw a pictograph for the given data. Use ⭐ to represent 5 marks:

Subject	Marks
Math	20
English	15
Science	25

Q13. Convert these numbers to tally marks:

a) 23 = _____

b) 18 = _____

c) 31 = _____

Q14. **True or False:** In a pictograph, if one symbol represents 5 items, then 3 symbols represent 15 items.

Answer: _____

Q15. A library recorded books borrowed:

Category	Number of Books
Story Books	45
Science Books	28
History Books	32

a) How many books were borrowed in total?
b) Which category had the least books borrowed?

Q16. Match the following:

Data Representation	Type
a) Uses pictures to show data	i) Tally Marks

b) Uses bars of different heights	ii) Bar Graph
c) Groups of 5 with diagonal line	iii) Pictograph

a) matches with _____
b) matches with _____
c) matches with _____

Q17. Fill in the blanks:

a) A _____ graph uses rectangular bars to compare data.

b) In tally marks, 3 groups of 5 plus 2 extra lines = _____.

Q18. A farmer counted animals on his farm. Each 🐄 = 3 animals:

Cows: 🐄 🐄 🐄 🐄

Goats: 🐄 🐄 🐄 🐄 🐄 🐄

a) How many cows are there?
b) How many goats are there?
c) How many more goats than cows?

Part C: Challenge Questions 🏆

☆☆☆ Hard

Q19. A bookstore sold books over 4 days. Study the data and create a table:

Monday: 3 groups of 5 + 2 lines
Tuesday: 4 groups of 5 + 4 lines
Wednesday: 2 groups of 5 + 3 lines
Thursday: 5 groups of 5

a) Make a table showing books sold each day
b) Which day had maximum sales?
c) What is the total number of books sold?

Q20. Create a bar graph for the given data about runs scored by cricket players:

Player	Runs
Virat	40
Rohit	30
Shikhar	50
Hardik	25

Use 1 cm = 10 runs scale

Q21. A school canteen recorded food sales. Each symbol = 6 students:

Samosa : 🥟🥟🥟🥟🥟

Sandwich : 🥪🥪🥪

Burger : 🍔🍔🍔🍔

Note: Each symbol = 6 students

a) How many students bought samosas?
b) How many students bought sandwiches?
c) What is the difference between samosa and burger buyers?
d) How many students bought food in total?

Q22. A sports store recorded sales for a week:

Item	Week 1	Week 2
Cricket Bats	18	24
Footballs	25	20
Badminton Sets	12	16

a) Which item sold the most in Week 1?
b) Which item increased its sales in Week 2?
c) What is the total sales of cricket bats over both weeks?

d) Which item had decreasing sales?

Q23. Students collected data on vehicles passing their school in one hour:

Cars: 𝍸 𝍸 𝍸 𝍸 ||

Bikes: 𝍸 𝍸 𝍸 𝍸 𝍸 |||

Buses: 𝍸 ||

a) How many vehicles of each type passed?
b) Which vehicle type passed the most?
c) What is the total number of vehicles?
d) How many more bikes than buses?

Q24. A fruit vendor tracked sales over 3 days. Each 🍎 = 5 kg of fruit:

Fruit	Monday	Tuesday	Wednesday
Apples	🍎 🍎 🍎 🍎	🍎 🍎 🍎 🍎 🍎	🍎 🍎 🍎
Bananas	🍎 🍎 🍎 🍎 🍎 🍎	🍎 🍎 🍎 🍎	🍎 🍎 🍎 🍎 🍎

Remember: Each 🍎 = 5 kg

a) How many kg of apples sold on Tuesday?

b) How many kg of bananas sold on Monday?
c) Which fruit sold more over the 3 days?
d) What is the total weight of fruits sold on Wednesday?

🔑 Answer Key

Part A: Warm-up Questions

Q1. 19

Q2. a) 8 red flowers (4 × 2), b) 6 yellow flowers (3 × 2)

Q3. Pencils: 12, Erasers: 8, Crayons: 15

Q4. Amit (12 books)

Q5. 3 groups of 5 + 2 lines

Q6. True

Q7. 9 slices (3 × 3)

Q8. Table

Part B: Practice Questions

Q9. a) 15 items, b) 17 items, c) 2 more items

Q10. a) Thursday (35°C), b) Monday (28°C), c) 7°C difference

Q11. a) 20 children (5 × 4), b) 12 children (3 × 4), c) Vanilla (12 children)

Q12. Math: ⭐⭐⭐⭐ (4 stars), English: ⭐⭐⭐ (3 stars), Science: ⭐⭐⭐⭐⭐ (5 stars)

Q13. a) 23 = 4 groups of 5 + 3 lines, b) 18 = 3 groups of 5 + 3 lines, c) 31 = 6 groups of 5 + 1 line

Q14. True

Q15. a) 105 books (45 + 28 + 32), b) Science Books (28)

Q16. a) matches with iii, b) matches with ii, c) matches with i

Q17. a) Bar, b) 17

Q18. a) 12 cows (4 × 3), b) 18 goats (6 × 3), c) 6 more goats

Part C: Challenge Questions

Q19. a) Monday: 17, Tuesday: 24, Wednesday: 13, Thursday: 25, b) Thursday, c) 79 books

Q20. Bar graph should show: Virat-40, Rohit-30, Shikhar-50, Hardik-25 (with proper scale)

Q21. a) 30 students (5 × 6), b) 18 students (3 × 6), c) 6 students difference (30 - 24), d) 72 students total

Q22. a) Footballs (25), b) Cricket Bats and Badminton Sets, c) 42 cricket bats, d) Footballs

Q23. a) Cars: 22, Bikes: 28, Buses: 7, b) Bikes, c) 57 vehicles, d) 21 more bikes

Q24. a) 25 kg (5 × 5), b) 30 kg (6 × 5), c) Bananas (75 kg vs 60 kg), d) 40 kg (15 + 25)

📊 Progress & Scoring Guide

Score Range	Performance Level	What This Means & Next Steps
21-24	🌟 Excellent!	**Outstanding work!** You're a Data Handling Expert! **Next steps:** Start creating your own surveys and data projects. Try collecting data from your neighborhood and presenting it. Help classmates understand bar graphs and pictographs. Challenge yourself with more complex data sets.
17-20	👍 Very Good!	**Great job!** You have strong data handling skills! **Keep improving:** Practice creating bar graphs from tables. Work on interpreting pictographs with different scales (1 symbol = multiple items). Try real-life data collection projects like tracking weather or sports scores.
13-16	👌 Good!	**You're doing well!** With focused practice, you'll excel! **Practice focus:** Master tally marks grouping by 5s. Practice converting between different data representations. Work on reading and creating simple bar graphs. Do more pictograph problems with scaling.
9-12	📖 Keep Practicing!	**You're learning!** Consistent practice will help! **Start here:** Focus on understanding tally marks first. Practice reading simple tables carefully. Learn to count symbols in pictographs. Do 5-10 data problems daily.
0-8	🌱 Keep Trying!	**Don't give up!** Everyone learns at their own pace! **Begin with:** Start with basic tally marks (groups of 5). Practice reading simple tables with adult help. Count pictures in pictographs step by step. Ask your teacher for extra worksheets and one-on-one guidance.

📝 Tips for Mastering Data Handling:

- **Master tally marks:** Always group by 5s (4 vertical + 1 diagonal). Practice counting large numbers using tally marks
- **Understand pictograph scales:** Remember that 1 symbol can represent multiple items (e.g., 1 🍎 = 5 apples)

- **Read bar graphs carefully:** Check the scale on the Y-axis. The height of each bar tells you the quantity
- **Practice with real data:** Collect data about your class (favorite subjects, birthdays by month, etc.)
- **Create your own graphs:** Turn tables into bar graphs and pictographs for practice
- **Compare and analyze:** Always look for "most," "least," "difference," and "total" in data
- **Daily practice:** Spend 15 minutes daily working with different data representations
- **Use graph paper:** It helps create neat and accurate bar graphs

✨ **Great Job Completing This Worksheet!** ✨

Keep practicing data handling and you'll become an expert at analyzing information!

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