



Data Detective: Lesson 2

Building Our Survey

Name: _____

Date: _____

Part 1: Choose Your Survey Topic

Check ONE topic that you're most curious about:

 Screen Time & Sleep

 Homework Habits

 Pet Ownership

 Birthday Patterns


 Snacks & Energy

 Weekend & Monday

 Reading Preferences

 My Own Topic:

My topic is about:

 **Part 2: Your Big Question**

What do you want to discover? Write your main research question:

Why are you curious about this?



Part 3: Design Your 5 Survey Questions

Create one question of each type. Remember: Each question should help answer your big question!

Question 1: Yes/No

Write your yes/no question:

✓ Tip: This will give you a pie chart with 2 parts

Question 2: Multiple Choice

Write your question:

Provide 4-5 answer options:

A) _____

B) _____

C) _____

D) _____

E) _____

✓ Tip: This will give you a bar chart to compare categories

Question 3: Check All That Apply

Write your question:

List at least 5 options people can choose multiple of:

- _____
- _____
- _____
- _____
- _____

✓ Tip: This shows which combinations are most common



Part 3 Continued: Survey Questions

Question 4: Likert Scale (1-5)

Write your rating question:

Define your scale:

1	2	3	4	5
_____	_____	_____	_____	_____

✓ Tip: This shows trends and average opinions

Question 5: Numeric

Write your number question:

What range of numbers do you expect?

Minimum: _____ **Maximum:** _____ **Units:** _____

✓ Tip: This gives you averages and can show scatter plots



Survey Design Golden Rules

✓ Keep questions clear and simple | ✓ Avoid double-barreled questions | ✓ Define your scales | ✓ Make sure each question helps answer your big question

Part 4: Data Collection Plan

Who will you survey? (Check all that apply)

Classmates Family Friends Neighbors Other: _____

How many people will you survey? _____ people

(Remember: Aim for at least 20 for good patterns!)

How will you collect responses?

Paper forms In-person interviews Online form Phone/video calls

Part 5: Make Your Predictions

What pattern do you think you'll find?

Which question do you think will give the most surprising results? Why?

Draw a sketch of what you think one of your graphs might look like:

Draw your predicted graph here



Part 6: Check for Bias

Could any of your questions lead people to a specific answer?

Is your sample representative? Who might be left out?

What other factors might affect your results that you're not measuring?

Lesson 2 XP Checklist

- Chose topic (+3 XP) Wrote 5 questions (+10 XP) Made plan (+5 XP)
- Made predictions (+5 XP) Checked bias (+2 XP)

Total XP Earned: _____ / 25

Teacher Review

Survey Strengths:

Suggestions for Improvement:

Ready to collect data? Yes Needs revision

My Notes & Ideas

