

Research Match-Up Worksheet

Unit I: Introduction to Research

Instructions:

- Read each example study carefully.
- Write the correct **type of research** (Fundamental, Applied, Experimental, or Descriptive).
- In the second column, briefly explain *why* you chose that type (1–2 sentences).

Examples of Studies

No.	Study Description	Research Type	Why did you choose this type?
1	Investigating how memory works when students learn before sleeping.		
2	Surveying how many hours per day students spend on social media.		
3	Testing whether group study leads to better grades than self-study.		
4	Exploring brain activity patterns when students solve math problems.		
5	Designing a mobile app to help students reduce procrastination.		
6	Studying the basic factors that influence attention span in students.		
7	Measuring the percentage of students who prefer online exams vs. offline exams.		
8	Testing whether practice quizzes improve exam scores		

	more than simple note reading.		
9	Developing an AI tool to detect plagiarism in student assignments.		
10	Analyzing student feedback about campus food facilities.		
11	Investigating the chemical processes in the brain that help memory formation.		
12	Finding ways to improve Wi-Fi access in classrooms to support e-learning.		
13	Comparing the effectiveness of handwritten notes vs. typed notes for retention.		
14	Recording student opinions on whether attendance improves performance.		
15	Exploring the role of motivation in improving student learning outcomes.		

Answer Key with Justifications

No.	Study Description	Correct Research Type	Justification
1	Investigating how memory works when students learn before sleeping.	Fundamental	Focuses on understanding basic principles of memory, not solving an immediate problem.
2	Surveying how many hours per day students spend on social media.	Descriptive	Collects and reports existing behavior without testing or intervention.
3	Testing whether group study leads to better grades than self-study.	Experimental	Compares two controlled groups (group study vs self-study) to test outcomes.
4	Exploring brain activity patterns when students solve math problems.	Fundamental	Seeks to understand basic cognitive/brain processes, not direct application.
5	Designing a mobile app to help students reduce procrastination.	Applied	Creates a practical solution to address a real-life student issue.
6	Studying the basic factors that influence attention span in students.	Fundamental	Aims to build theoretical knowledge about attention, not immediate solutions.
7	Measuring the percentage of students who prefer online exams vs. offline exams.	Descriptive	Simply reports what students prefer; no testing or new intervention.
8	Testing whether practice quizzes improve exam scores more than simple note reading.	Experimental	Involves comparing outcomes between two different learning strategies.
9	Developing an AI tool to detect plagiarism in student assignments.	Applied	Focused on building a tool to solve a practical academic integrity issue.
10	Analyzing student feedback about campus food facilities.	Descriptive	Collects and reports opinions without testing or new intervention.
11	Investigating the chemical processes in the brain that help memory formation.	Fundamental	Seeks theoretical understanding of memory at a biological/chemical level.

12	Finding ways to improve Wi-Fi access in classrooms to support e-learning.	Applied	Provides practical improvements for a real student problem (internet access).
13	Comparing the effectiveness of handwritten notes vs. typed notes for retention.	Experimental	Tests outcomes of two different note-taking methods under controlled conditions.
14	Recording student opinions on whether attendance improves performance.	Descriptive	Collects existing opinions/attitudes without testing or intervention.
15	Exploring the role of motivation in improving student learning outcomes.	Fundamental	Builds theoretical understanding of motivation's role in learning, not directly solving a practical problem.

Scoring Rubric (Out of 15 Marks)

Mark Distribution per Question (1 mark each)

- **0.5 mark** → Correctly identifies the type of research.
- **0.5 mark** → Gives a reasonable justification (1–2 sentences showing understanding).

Levels of Performance (for each answer)

- **1 mark (Full Credit):** Correct research type + clear justification.
- **0.5 mark (Partial Credit):** Correct type but weak/missing justification OR wrong type but justification shows some understanding.
- **0 mark (No Credit):** Wrong type + no justification / irrelevant justification.

Overall Grading Scale (15 total)

- **13–15 marks (Excellent):** Almost all answers correct with clear, logical justifications.
- **10–12 marks (Good):** Mostly correct, some weak justifications.
- **7–9 marks (Fair):** About half correct, justifications need improvement.
- **4–6 marks (Poor):** Few correct, vague or missing justifications.
- **0–3 marks (Very Poor):** Minimal effort, mostly incorrect answers.