



# Engineering Design Process

Name: \_\_\_\_\_

Date: \_\_\_\_\_

Grade: Grade 3

## Part A: Multiple Choice

Circle the best answer for each question.

1. Grade 3 students must design a cup holder that fits on a desk using only paper and tape. What is the main constraint?

- A) The students' names
- B) The classroom's paint color
- C) The allowed materials are only paper and tape
- D) The time of day when they work

2. A toy car design must roll 1 meter. This rule is an example of a:

- A) Constraint on color
- B) Criterion for success
- C) List of materials
- D) Name for the prototype

3. A Grade 3 team tests two bridge designs. Design A holds 8 blocks, Design B holds 12. What should they do?

- A) Pick Design A because it is simpler
- B) Study Design B and improve weak parts
- C) Start over with no data
- D) Combine them randomly without planning

4. Why do Grade 3 engineers iterate their designs?

- A) Because the first try is always perfect
- B) To waste time and materials
- C) To improve the design based on test results
- D) Because the teacher requires them to

## Part B: Fill in the Blank

Write the correct answer on each line.

1. A working test version of a design is called a \_\_\_\_\_.
2. The limits on a design, like materials or time, are called \_\_\_\_\_.
3. The rules that tell when a design is successful are the \_\_\_\_\_.
4. Repeating the design steps to make a design better is \_\_\_\_\_.
5. When Grade 3 engineers change a design based on data, they \_\_\_\_\_ it.

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