

Design Challenge Handout

My Name _____ My Team Members _____

The zoo just rescued an elephant, but it doesn't have a trunk! Your challenge is to design an artificial trunk for the elephant.

Design Constraints:

- The trunk must attach to the elephant's body (the poster).
- The trunk must be between 50 cm and 80 cm long.
- The elephant must be able to breathe through the end of the trunk.
- You may use only the materials provided.

PLAN

List the functions of an elephant's trunk: _____,

_____.

Which materials will your team use? _____

Draw and label a picture of your elephant trunk in the box below.

DESIGN – Build your trunk!

CHECK

Did you follow the _____ Design Process?	YES	NO
Is the trunk attached to the body?	YES	NO
Is your trunk between 50 cm and 80 cm?	YES	NO
Is there a place for your elephant to breathe?	YES	NO

How did your team work together?



SHARE

Write one paragraph to describe your elephant trunk.

Prepare a group presentation to tell the class about your elephant trunk.

Elephant Trunk Design Challenge - Rubric

	2	1	0
Design Sheet	95-100% complete and accurate	70-94% complete and accurate	<70% accurate
Research	Evidence of research in notes; the student can describe the functions of an elephant's trunk; information from research was applied to the trunk design	Evidence of research in notes; the student can describe the functions of an elephant's trunk	Notes missing or lacking detail; the student cannot describe the functions of an elephant's trunk
Plan/Diagram	Diagram includes details and labels; evidence of revisions; matches final product	Diagram includes details and labels; does not match final product	Diagram lacks details or does not match elephant trunk design
Trunk	The trunk met all design criteria: attached to the body, 50-80 cm long, breathable	The trunk met 2 of the 3 design criteria	The trunk met 0 or 1 design criteria
Teamwork	The student was an active participant; conflicts were minimal and solved within the group	The student was an active participant; 1 conflict needed teacher intervention	The student did not participate or needed multiple conflicts solved by the teacher
Written Report	One paragraph report describes the trunk in detail and matches the design	One paragraph report includes some detail and matches the design	Report is less than one paragraph, lacks detail, or does not match the design