

2nd grade



THEMED STEM SQUARES

Student Choice Boards



IMAGINE DESIGN CREATE

Dear Families,

Today your child will bring home their first Themed STEM SQUARES sheet. These student choice boards encourage children to have a choice in the tasks that they complete.

These tasks encourage creative problem solving and critical thinking skills. It is not expected that children produce a 'perfect' result. Instead, creations that have been well thought out and where each feature of the design can be identified and explained are highly regarded.

Children can use any materials on hand to complete these tasks. Using old plastic bottles, newspaper and cardboard are a good start. The tasks are kept open-ended to allow students to fulfill their innovative and creative potential.

When asking to design something we do not expect actual size. For example if asked to make a hang glider, a small/minature version is suitable.

In some cases it may not be possible to bring the design into school. In this situation please take a photo or video to show.

If you have further questions please ask your child's teacher

Regards

Ms. Franklin



STEM SQUARES

Transportation



Student Choice Board

Name: _____

Build a
ramp for
cars

Engineer a
zip line to
deliver a
parcel

Create a
balloon
powered
boat

Build a
flying
machine

FREE

CHOICE

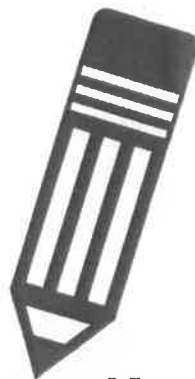
Design a
truck and
trailer

Create an
airplane that
can carry
something
small

Build a
model of a
bulldozer

Create a
working
parachute
to deliver a
package

STEM SQUARES School



Student Choice Board

Name: _____

Create a
treasure
map for
your school

Design
something
to make a
teachers job
easier

Build a case
that can hold
all your
pencils and
markers

Design a way
to deliver a
secret note to
a friend

FREE

CHOICE

Create a
model of
your
classroom

Design a new
sign for your
school
(be creative)

Create a
map of
your
classroom

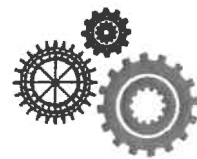
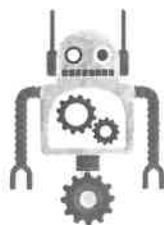
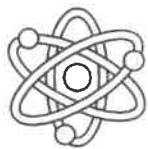
Build a
school bus

NAME:

DATE:

STEM SHAPES

STUDENT CHOICE BOARD REFLECTION



What materials did you use?

What did you enjoy most about this task?

RATE THIS TASK (CIRCLE ONE)

NOT
GREAT

1

2

3

4

5

THE
BEST

Make a

choice



Write a creative story about your design.



Write an informational text about your design



Give a step-by-step explanation of how you completed your task (procedural text)



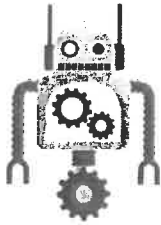
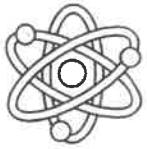
Take photos of each step of your task and write a short explanation under each photo.



Create a short movie about your design.

NAME:

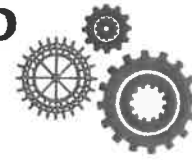
DATE:



STEM SHAPES

STUDENT CHOICE BOARD

REFLECTION



Science is the study of the physical and natural world around us, through experiments and observations.

Technology is the machinery and devices developed from scientific knowledge.

Engineering is the process of using knowledge and principles to design, build, and analyze objects.

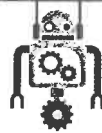
Mathematics is the study of numbers, equations, functions, and shapes and their relationships.

Which disciplines of STEM did you use in your chosen task?

Explain how you applied that discipline.



SCIENCE



TECHNOLOGY



ENGINEERING



MATHEMATICS
