

PACE Long-Range Project 2017

Guidelines/ Information/ Instructions

Name

Parents and Families:

This year, to fit with our theme of Systems, our long-range project will consist of two parts:

- 1. The PACE student will create a model of a familiar system showing the components that we have studied this year.**
- 2. The PACE student will use SCRATCH to create an interactive program that will be connected to the model.**

Much of the model will be constructed at home during the months of March, April, and May. The programming can be completed during PACE sessions, at home, and during special “open” times that will be announced at each school when available. These work session times will be when the Gifted Resource Teacher is available, and the student has completed any classroom work and gained permission from their teacher.

This document contains guidelines that will help in the construction of the model, rules and procedures that must be followed, reflection components that the student must complete, and information pertinent to the project. When the projects are complete (both the model and the Scratch program) , students will present their projects to their peers and answer questions regarding the process. This project and its presentation to peers and staff is an important part of our PACE program. It not only gives the student a product to show their understanding of our theme (SYSTEMS) for the year, it gives validation to their learning experience by providing a real-world experience with feedback that will help them grow as a gifted learner.

Mary Sebera & Pete Herzing

The following checkpoints will help us stay on target throughout the project.

Checkpoint #1: March 14/ March 15

- Read Packet
- Parent Signature
- SCRATCH Account Created

Checkpoint #2: March 21/ March 22

- Idea for system submitted to PACE teacher and approved.
- Conference with PACE teacher in regards to system components.

Checkpoint #3: March 23/ March 24

- Completed Systems Concept Map

Checkpoint #4: March 30/ March 31

- Model Design

Checkpoint #5: May 18/ May 19

- Model Due

Checkpoint #6: May 25/ May 26

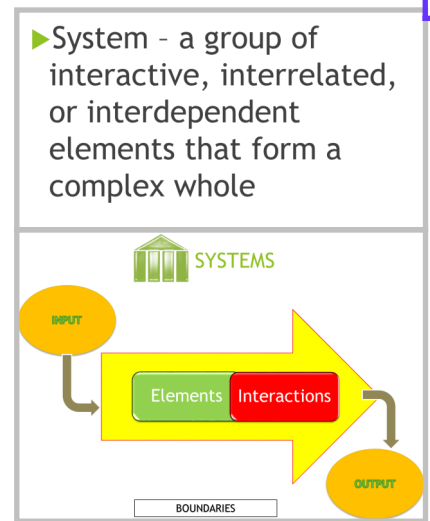
- SCRATCH Program Completed and Debugged (see checklist)

Presentation to school in June!

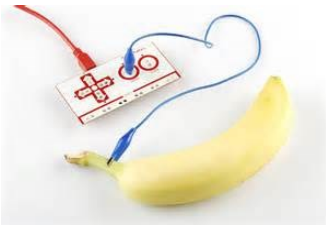


Requirements and Guidelines:

Your System must fit the definition that we have been using this year in PACE, be school appropriate, and you must be able to identify and describe its components using the Systems Concept Map.



Your Model (which will be constructed by you) should fit on a school desk top, be made from non-conductive materials (such as plastic, cardboard, wood, fabric, etc.), and be large enough to attach the Makey Makey alligator clips to all of your components.



Note: You can use materials like Legos, K'nex, or model kits; just don't bring in your pre-made Tonka trucks!



Your SCRATCH Program will identify and define your system's components (from the concept map) and guide the user through all of your system's components.

SCRATCH

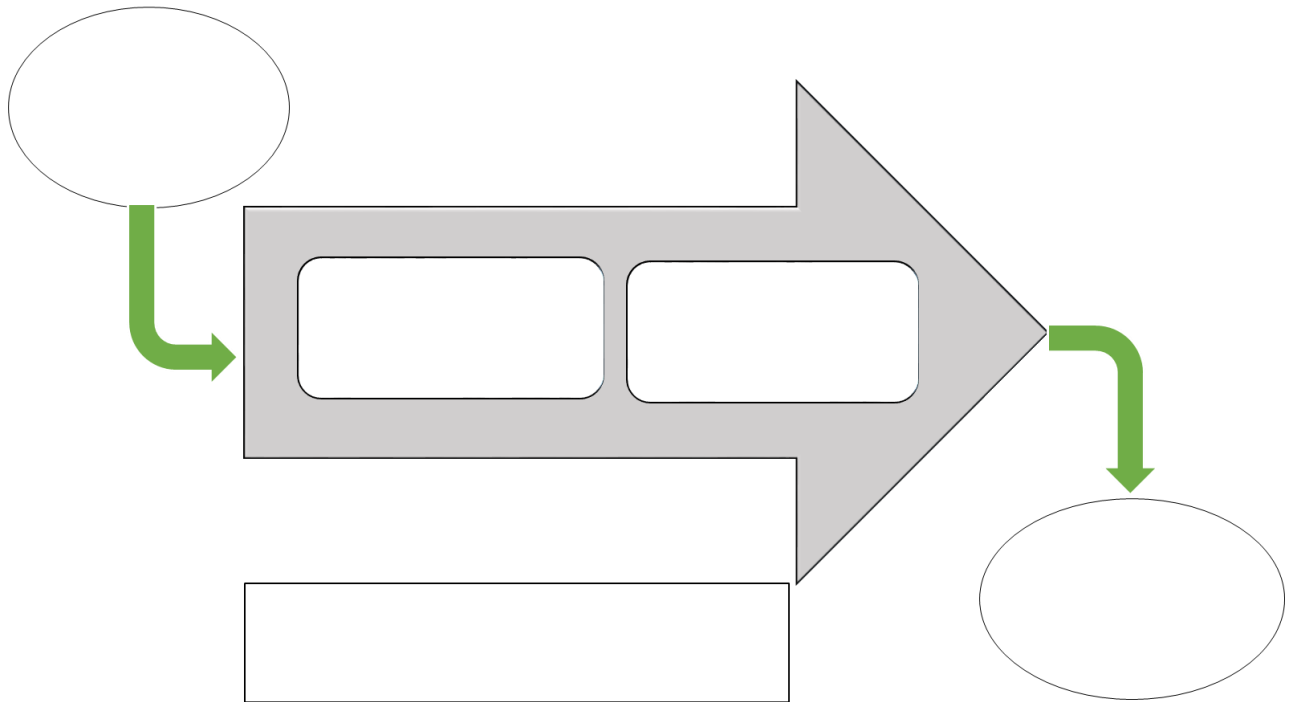


Checkpoint #2

System Idea

System Name: _____

SYSTEMS



Notes:

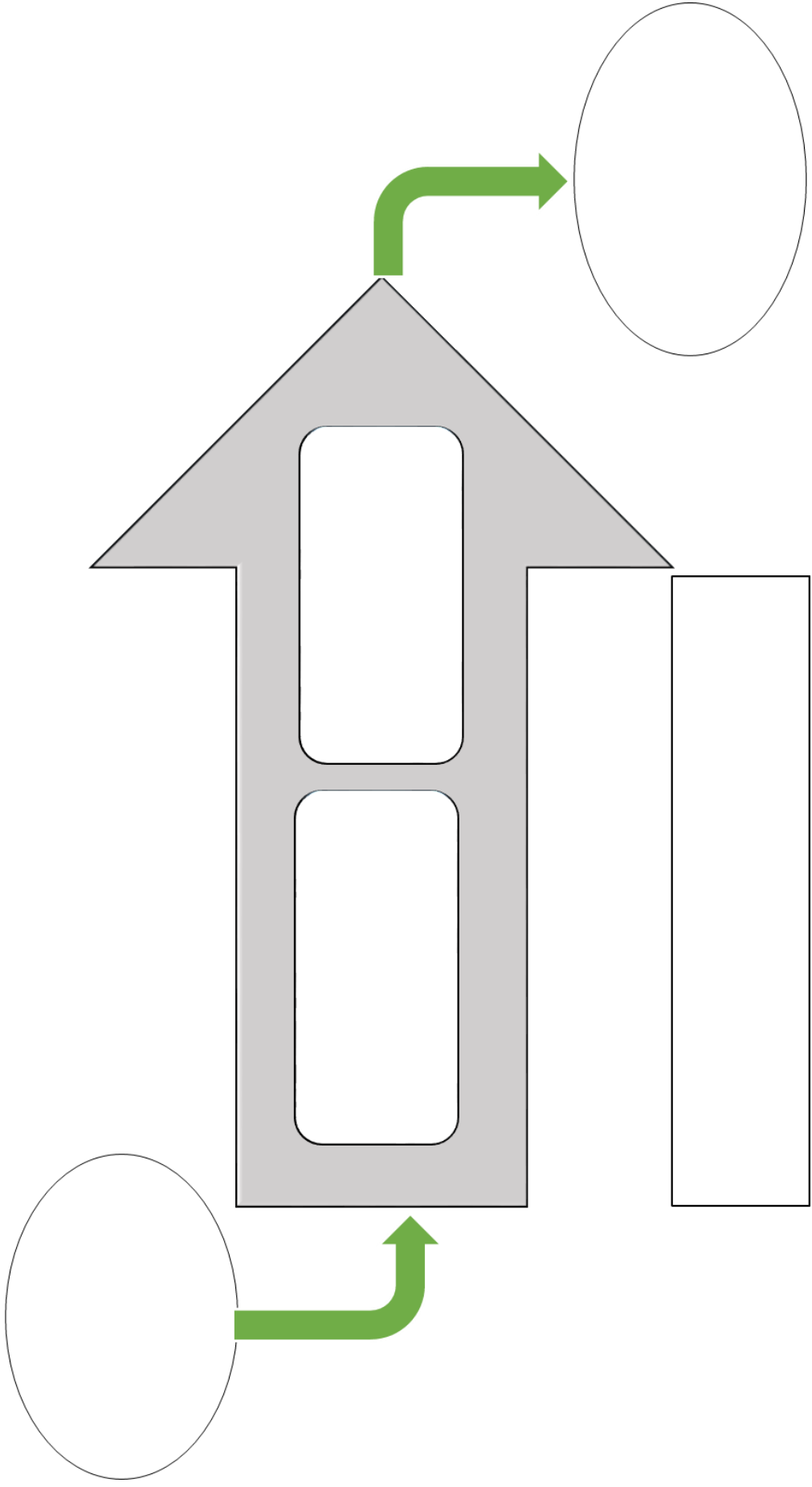
PACE Teacher Signature

Date

Checkpoint #3

Concept Map

SYSTEMS



Checkpoint #4

Model Design

List the materials you will use:

Sketch your design and note the dimensions:

Checkpoint #6

SCRATCH PROGRAM CHECKLIST

- Input and Output are accurately identified and described
- Elements are accurately identified
- All Interactions of the elements are clearly described
- Boundaries are identified including limitations as well as what holds it together
- Proofread for the following:
 - Complete sentences that make sense
 - Proper punctuation
 - Correct spelling
- Debugged
- Guides the user through your system in a sensible way
- Graphics are organized and help convey what you're trying to say!

Reflection Page

How has this project helped with your understanding of the concept of systems?

What was the most challenging part of this project?

What part are you most proud of and why?

If you could start again, what would you change?

Notes Page

Checkpoint #1

Long-Range Project Interactive System

I have read and understand the requirements and guidelines pertaining to the project. I am aware of the checkpoint dates and items due.

Student Signature

Date

Parent Signature

Date

SCRATCH Account Information

Username: _____

Password: _____