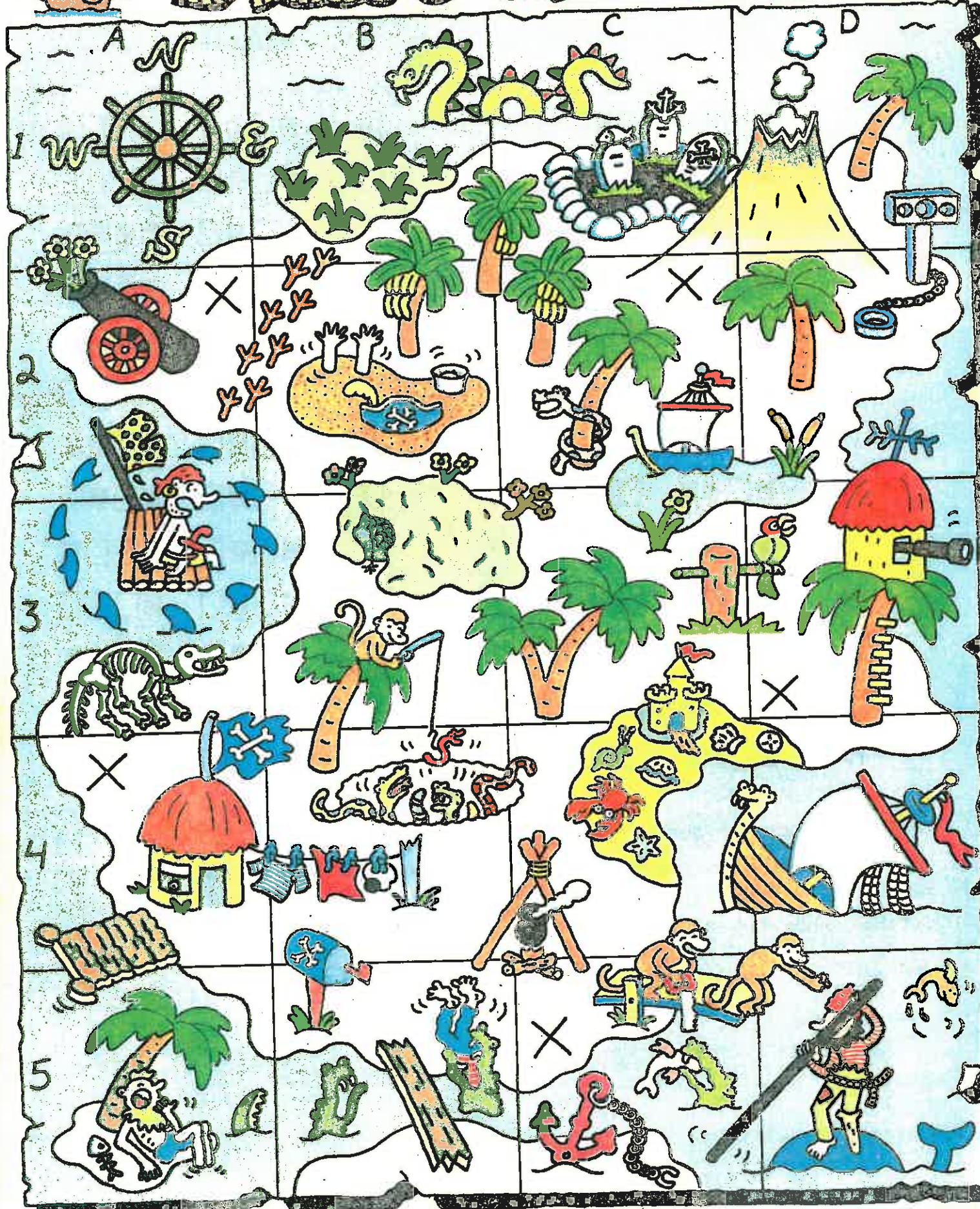




Stein Island





Unplugged

Name: _____

Date: _____

Binary Bracelets

Binary Decoder Key



A	■ □ ■ ■ ■	■ ■ ■ ■ □	N	■ □ ■ ■ ■	□ □ □ ■ ■
B	■ □ ■ ■ ■	■ ■ ■ □ ■	O	■ □ ■ ■ ■	□ □ □ □ □
C	■ □ ■ ■ ■	■ ■ ■ □ □	P	■ □ ■ □ □	■ ■ ■ ■ ■
D	■ □ ■ ■ ■	■ □ ■ ■ ■	Q	■ □ ■ □ □	■ ■ ■ □ □
E	■ □ ■ ■ ■	■ □ ■ □ □	R	■ □ ■ □ □	■ ■ ■ □ ■
F	■ □ ■ ■ ■	■ □ ■ □ ■	S	■ □ ■ □ □	■ ■ ■ □ □
G	■ □ ■ ■ ■	■ □ ■ □ □	T	■ □ ■ □ □	■ □ ■ ■ ■
H	■ □ ■ ■ ■	□ ■ ■ ■ ■	U	■ □ ■ □ □	■ □ ■ □ □
I	■ □ ■ ■ ■	□ ■ ■ ■ □	V	■ □ ■ □ □	■ □ ■ □ ■
J	■ □ ■ ■ ■	□ ■ ■ □ ■	W	■ □ ■ □ □	■ □ ■ □ □
K	■ □ ■ ■ ■	□ ■ ■ □ □	X	■ □ ■ □ □	□ ■ ■ ■ ■
L	■ □ ■ ■ ■	□ □ ■ ■ ■	Y	■ □ ■ □ □	□ ■ ■ ■ □
M	■ □ ■ ■ ■	□ □ ■ □ □	Z	■ □ ■ □ □	□ ■ ■ □ ■

Find the first letter of your first name.

Fill in the squares of the bracelet below to match the pattern of the squares next to the letter that you found.

Cut the bracelet out and tape it around your wrist to wear it!

--	--	--	--	--	--	--	--

The Iteration

*Repeat this part
3 times!*



Clap



Clap



Clap



Behind Head



Waist



Behind Head



Waist



Clap



Clap



Clap



Left Up



Right Up



Left Up



Right Up



Clap



Clap



Clap



Belly Laugh

Then do this



Unplugged

Name: _____

Date: _____

For Loop Fun

Number Lines and Score Sheet



Directions:

- * Use the number lines to trace the "for loop" for each turn
 - * Start at the starting value of X
 - * Count down the number line, circling the numbers at the correct interval
 - * Stop when you get to the stopping value
- * Add all of the circled values to get the score for your round
- * Best 2 out of 3 Wins

ROUND 1

For values of X from _____ to _____ incrementing by _____

Player 1 *starting value* *stopping value* *interval*

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18

SCORE _____

For values of X from _____ to _____ incrementing by _____

Player 2 *starting value* *stopping value* *interval*

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18

SCORE _____

ROUND 2

For values of X from _____ to _____ incrementing by _____

Player 1 *starting value* *stopping value* *interval*

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18

SCORE _____

For values of X from _____ to _____ incrementing by _____

Player 2 *starting value* *stopping value* *interval*

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18

SCORE _____

ROUND 3

For values of X from _____ to _____ incrementing by _____

Player 1 *starting value* *stopping value* *interval*

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18

SCORE _____

For values of X from _____ to _____ incrementing by _____

Player 2 *starting value* *stopping value* *interval*

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18

SCORE _____

Algorithm	A list of steps to finish a task
Computer Science	When people use computer to solve problems
Coding/programming	Set of instructions given to computers
Syntax	Set of rules on how to combine instructions
Loop	The action of doing something over and over again
Binary	Showing information by only using two options
Bug	An error that prevents a program from running the way it should
Command	An instruction for the computer
Conditional	Statement that only runs under certain conditions or situations
Debugging	Finding errors and fixing them in programs
Event	An action that causes something to happen
Function	A segment of code that includes the steps performed
Variable	A placeholder for a piece of information that can change

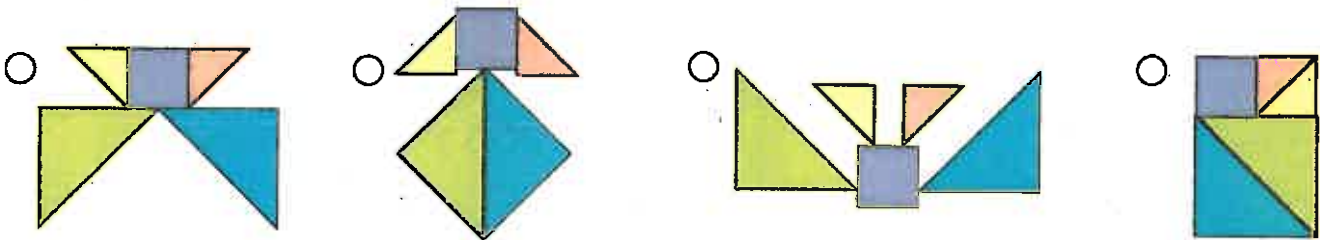
Very specific algorithms help multiple people create identical products.

Less specific algorithms allow a great deal of flexibility for every person to have something different.

Circle the drawing that does not follow the algorithm provided.

Algorithm #1

- 1) Put two large triangles at the bottom of the image.
- 2) Put a square on top of those two triangles.
- 3) Put two little triangles beside the square.



Circle the algorithm that goes with Drawing 1.

Algorithm A

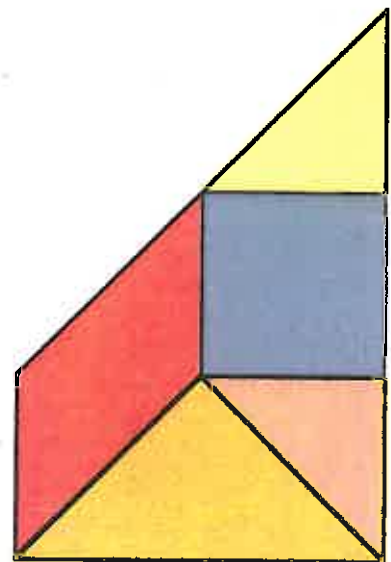
- 1) Use two triangles, a square, and another piece
- 2) Line two triangles up with the square
- 3) Put the last piece on top of the square

Algorithm B

- 1) Use three triangles, a rhombus, and another piece
- 2) Put the rhombus at the bottom
- 3) Put all three triangles above the rhombus
- 4) Put the final piece to the left of everything else

Algorithm C

- 1) Use three triangles, a square, and another piece
- 2) Line two triangles up with the square
- 3) Put a third triangle beneath the other shapes
- 4) Put the last piece on the left



Drawing 1

Project Mapping to ADST 6-9 Competencies

Example Project: Poster on the Water Cycle

Competency	Aspect of the project that maps to the competency
Understanding Context	Discussing who will be reading the poster, what it's supposed to demonstrate, how it'll be displayed and how people will interact with it, and why creating the poster is important.
Defining	Identifying the project criteria and constraints. How big is the poster? Does it need to have a title? How many images will it have? What information must be illustrated?
Ideating	Brainstorming potential ideas for the poster, such as possible titles, poster board colours, various facts about the water cycle, and different images to include, and lastly, choosing a set of specific ideas to pursue.
Prototyping	Making a first version of the poster either by making a sketch or collage, writing down a description, or telling someone about it.
Testing	Gathering feedback about the poster perhaps from the teacher and/or peers, iterating on the prototype, and refining it.
Making	Creating the final poster using a variety of materials: poster board, pencil crayons, markers, pictures, glue, etc.
Sharing	Presenting the poster to the intended audience, evaluating and/or reflecting on the work, and receiving final feedback.

Project Mapping to ADST 6-9 Competencies

Example Project: _____

Competency	Aspect of the project that maps to the competency
Understanding Context	
Defining	
Ideating	
Prototyping	
Testing	
Making	
Sharing	