

NO-PREP LESSON PLANS THAT ARE EASY TO FOLLOW. YOU JUST CHOOSE THE READ-ALoud & ACTIVITIES THEN PRINT. MAKING IT EASY TO PREPARE SUB PLANS!

LIBRARY PLANS

TODAY'S GOAL: Students will practice **pattern recognition**.

Choose a picture book to read aloud:

- City of Shapes by Diana Murray
- Swatch: The Girl Who Loved Color by Julia Denos
- Lots of Dots by Craig Frazier

MATERIALS

- Memory Pattern cards - differentiated
- Devices to play pattern games (optional)
- Solve the Pattern - differentiated
- Coding Riddles

LESSON

- 1) Read aloud this book I left to the class: _____
- 2) Play Memory Patterns as a class. You'll create a pattern and then students will try to duplicate it.
 - a) Clap.
 - b) Clap.
 - c) Clap.
- 3) Students other. Co
- 4) While w following
 - Play
 - Sol
 - Co

LIBRARY PLANS

TODAY'S GOAL: Students will practice **sequencing**.

Choose a picture book to read aloud:

- If You Give a Mouse a Cookie by Laura Numeroff
- The Very Hungry Caterpillar by Eric Carle
- The Napping house by Audrey Wood

MATERIALS

- Devices to play games

LESSON

- 1) Read aloud this book I left to the class: _____
- 2) Students choose a digital game to practice sequencing

PREK - Grade 1	GRADES 2-3	GRADES 4+
<ul style="list-style-type: none"> <input type="checkbox"/> Code Monkey Jr <input type="checkbox"/> Scratch Jr <input type="checkbox"/> Daisy the Dinosaur 	<ul style="list-style-type: none"> <input type="checkbox"/> Scratch Jr <input type="checkbox"/> BeeBot <input type="checkbox"/> Code Monkey <input type="checkbox"/> Code Emoji 	<ul style="list-style-type: none"> <input type="checkbox"/> Scratch <input type="checkbox"/> Code.org <input type="checkbox"/> Ozotown <input type="checkbox"/> Code Monster

LIBRARY PLANS

TODAY'S GOAL: Students will practice **problem-solving skills**.

Choose a picture book to read aloud:

- If I Built a House by Chris Van Dusen
- The Most Magnificent Thing by Ashley Spires
- A Computer Called Katherine by Suzanne Slade

MATERIALS

- Devices to play digital maze games
- Printed Mazes
- Theme Dance - differentiated
- Number Line Jumper
- Debug the Code - differentiated

LESSON

- 1) Read aloud this book I left to the class: _____
- 2) After reading, students will work with a partner to write a **THEME DANCE**. They'll create dance moves to fit the theme on the planning page. Then, they'll share the programmed dance with the rest of the group.
- 3) While waiting for others to finish, they'll choose one of the following activities:
 - Solve mazes on a device on How to Code

LIBRARY PLANS

TODAY'S GOAL: Students will practice **deconstruction (rebuilding code)**.

Choose a picture book to read aloud:

- Beautiful Oops by Barney Saltzberg
- Rosie Revere Engineer by Andrea Beaty
- What Do You Do With a Problem? by Kobi Yamada

MATERIALS

- Break It Down - differentiated

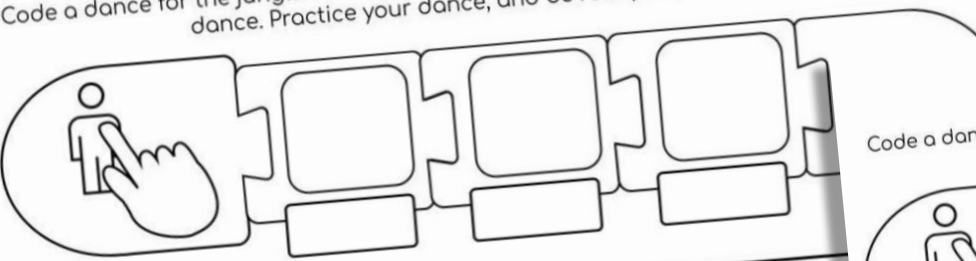
LESSON

- 1) Read aloud this book I left to the class: _____
- 2) Explain that often times, programmers break down their code into smaller bite-sized tasks. Sometimes they also start with the end in mind, and then figure out how to build the code to get to that goal.
- 3) Students will work on an activity:
 - Break It Down - Challenge students to identify which step(s) may be missing
 - Reverse Engineering - Students can also try to rebuild LEGO structures from looking at it, or solve a Rubik's Cube.
 - Logic Puzzles

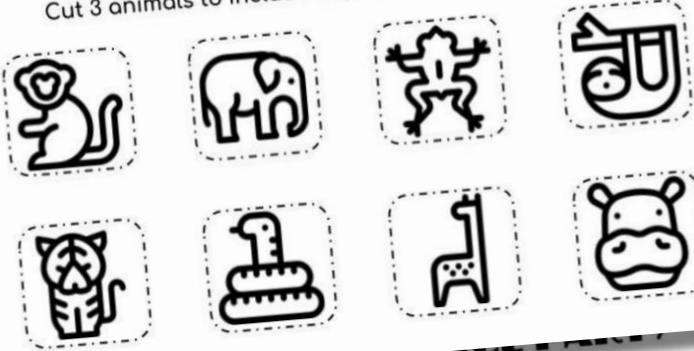
PLANNING SHEETS INVITE STUDENTS TO PROGRAM THEIR OWN THEMED DANCE!

THEME DANCE PARTY

Code a dance for the jungle. Paste the animals to show the motions that will be part of the dance. Practice your dance, and be ready to perform it!

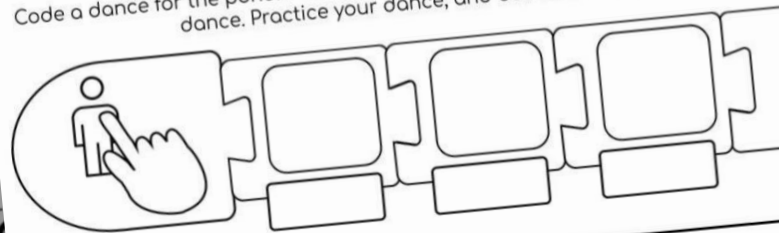


Cut 3 animals to include in your dance. Paste them in the blocks above.

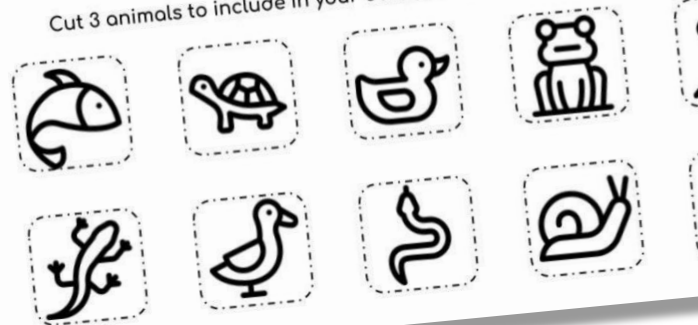


THEME DANCE PARTY

Code a dance for the pond. Paste the animals to show the motions that will be part of the dance. Practice your dance, and be ready to perform it!



Cut 3 animals to include in your dance. Paste them in the blocks above.



THEME DANCE PARTY

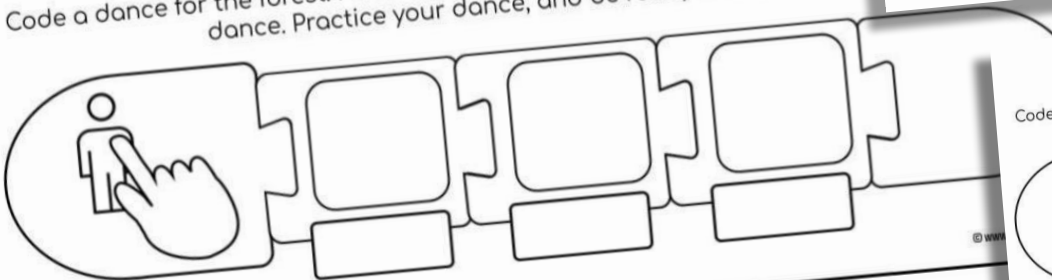
Code a dance for the ocean. Paste the animals to show the motions that will be part of the dance. Practice your dance, and be ready to perform it!



Cut 3 animals to include in your dance. Paste them in the blocks above.



Code a dance for the forest. Paste the animals to show the motions that will be part of the dance. Practice your dance, and be ready to perform it!



Cut 3 animals to include in your dance. Paste them in the blocks above.



PROMPTS THAT INVITE STUDENTS TO WRITE A PROGRAM FOR THEIR OWN THEMED DANCE. INCLUDES CODING BLOCKS FOR THEM TO PLAN.

Code a dance for an UNDERWATER ADVENTURE. Imagine yourself as real or mythical sea creatures. Use coding to choreograph movements that mimic swimming, floating, or diving.

Code a dance for an OUTER SPACE EXPLORATION. Imagine yourself as astronaut or aliens. Use coding commands to depict zero gravity movements, rocket launches, or cosmic dance moves.

Code a dance for a JUNGLE SAFARI. Use coding to program movements that mimic animals like lions, monkeys, or elephants. You can also include sound effects or music that compliments the jungle atmosphere.

Code a dance for a SUPERHERO SHOWDOWN. Program movements that showcase superhero poses and super powers. You can even include special effects to enhance the code.

Code a dance for a TIME TRAVEL ADVENTURE. Write code for a dance routine that takes the audience on a journey through time. Program movements that represent different historical periods or events, or futuristic time periods.

Code a dance for an ENCHANTED FOREST. Write code for a dance routine set in an enchanted forest. Imagine yourself as fairies, magical creatures, or woodland characters. Program graceful and whimsical movements.

THEME DANCE PARTY

Code a dance for the jungle. Include animal motions that will be part of the dance.

Practice your dance, and be ready to perform it!

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THEME DANCE PARTY

Code a dance for the jungle. Include animal motions that will be part of the dance.

Practice your dance, and be ready to perform it!

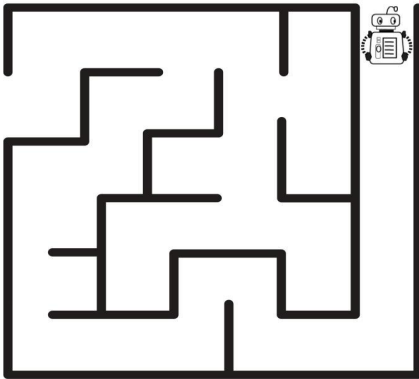
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ENGAGE STUDENTS IN PROBLEM - SOLVING, SEQUENCING, AND DEBUGGING ALL AT ONCE WITH FUN GAMES!

DEBUG THE CODE

Look at the code below to get the robot through the maze. Can you find and fix the errors in the code?

←↑→↑←↑←↑→↑↔↓

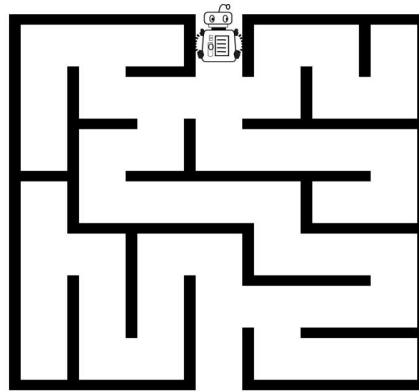


© www.r2d3.com

DEBUG THE CODE

Look at the code below to get the robot through the maze. Can you find and fix the errors in the code?

↓→↓→↓←↑→↓→↓

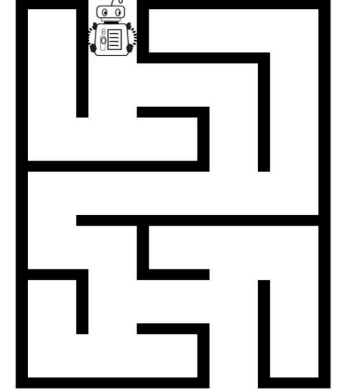


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DEBUG THE CODE

Look at the code below to get the robot through the maze. Can you find and fix the errors in the code?

↓←↓→↓←↑→↓



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NUMBER LINE JUMPER

Look at each number line and jump over the listed numbers. Then, write the amount you're jumping by to get to the end of the line.

JUMP 9, 12, 15, 18

7 8 9 10 11 12 13 14 15 16 17 18 19 20 21

JUMP 7, 10, 13

4 5 6 7 8 9 10 11 12 13 14 15 16

JUMP 5, 8, 11, 13

2 3 4 5 6 7 8 9 10 11 12 13 14

WRITE YOUR OWN!

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

NUMBER LINE JUMPER

Look at each number line and jump over the listed numbers. Then, write the amount you're jumping by to get to the end of the line.

JUMP 4, 7, 13

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

JUMP 8, 11, 14, 17

5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

JUMP 5, 8, 11

2 3 4 5 6 7 8 9 10 11 12

JUMP 6, 9, 12, 15

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

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STUDENTS TAKE TURNS TO BECOME PROGRAMMERS OR ROBOTS – WRITING OR FOLLOWING CODE!

- JUMP, SPIN
- JUMP, SPIN, HOP
- JUMP, SPIN, HOP, CLAP
- JUMP, SPIN, HOP, CLAP, HIGH 5

- TOUCH NOSE, PAT HEAD
- TOUCH NOSE, PAT HEAD, WIGGLE FINGERS
- TOUCH NOSE, PAT HEAD, WIGGLE FINGERS, DANCE
- TOUCH NOSE, PAT HEAD, WIGGLE FINGERS, DANCE, STICK OUT TONGUE

- CLAP, JUMP
- CLAP, JUMP, SPIN
- CLAP, JUMP, SPIN, SIDE STEP
- CLAP, JUMP, SPIN, SIDE STEP, 360 TURN

- DRAW A CIRCLE IN THE
- CIRCLE, TRIANGLE
- CIRCLE, TRIANGLE, S
- CIRCLE, TRIANGLE, S

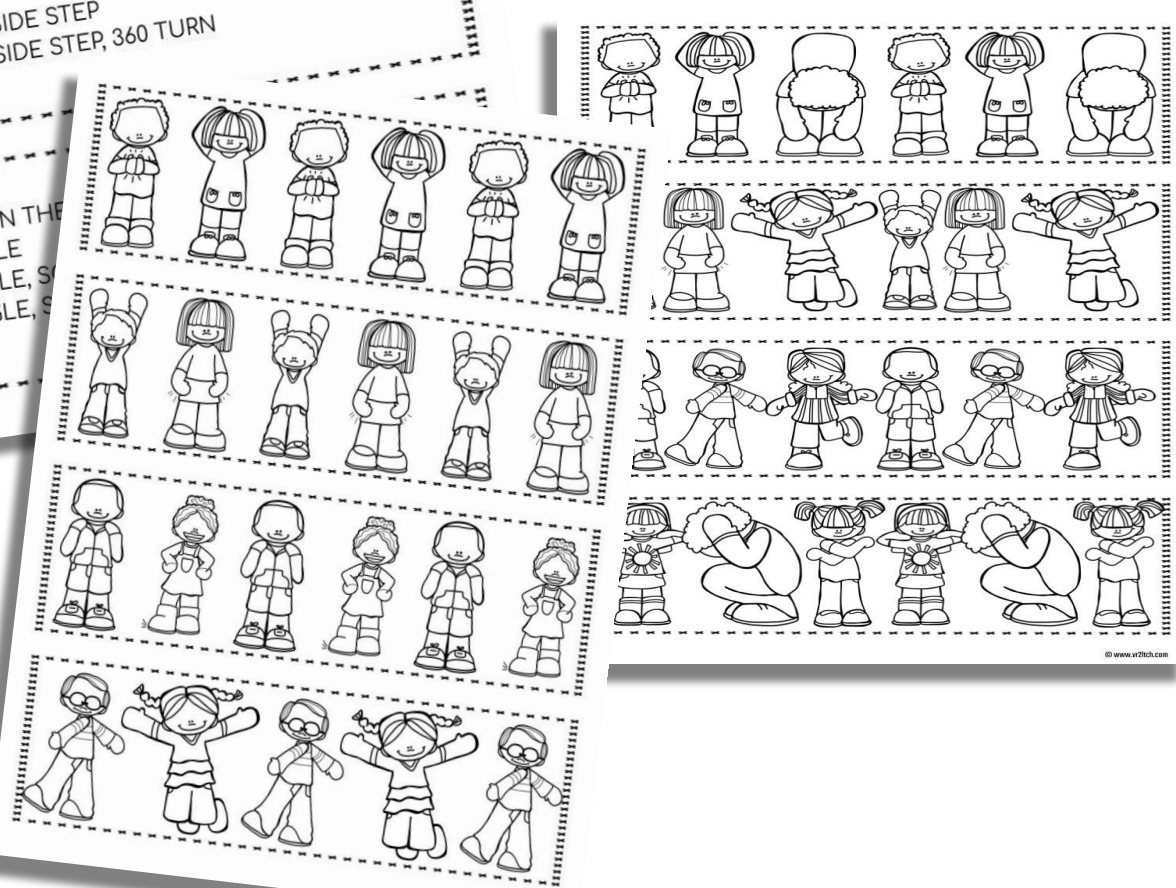
- Clap, clap, stomp
- Clap, clap, stomp, snap, snap
- Clap, clap, stomp, snap, snap, tap foot, tap foot, tap foot
- Clap, clap, stomp, snap, snap, tap foot, tap foot, tap foot, tap drum

- A, B
- A, B, C
- A, B, C, DOG
- A, B, C, DOG, CAT

- WOOF
- WOOF, WOOF, MEOW
- WOOF, WOOF, MEOW, TWEET
- WOOF, WOOF, MEOW, TWEET, MONKEY

- 2 STEPS FORWARD, JUMP
- 2 STEPS FORWARD, JUMP, SPIN
- 2 STEPS FORWARD, JUMP, SPIN, HOP
- 2 STEPS FORWARD, JUMP, SPIN, HOP, SHUFFLE

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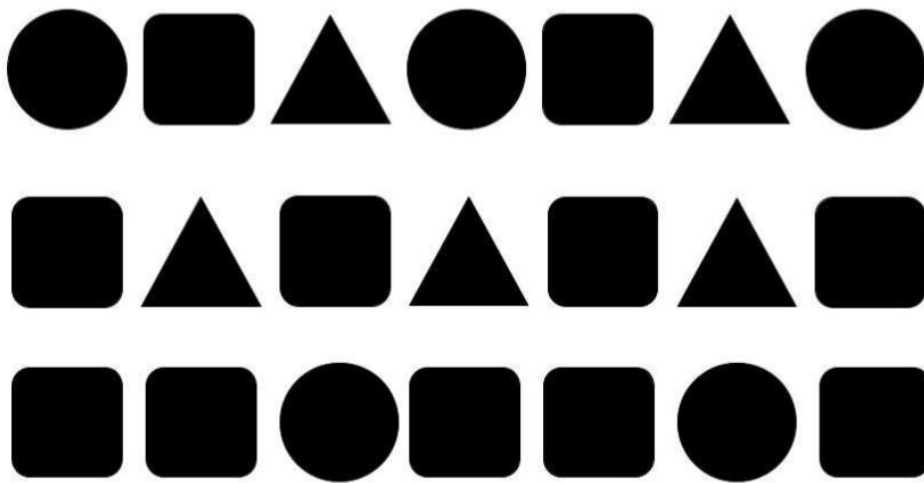


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STUDENTS COMPLETE PATTERNS AND SOLVE RIDDLES. GREAT FOR PROBLEM SOLVING AND PATTERN RECOGNITION - IMPORTANT CODING SKILLS!

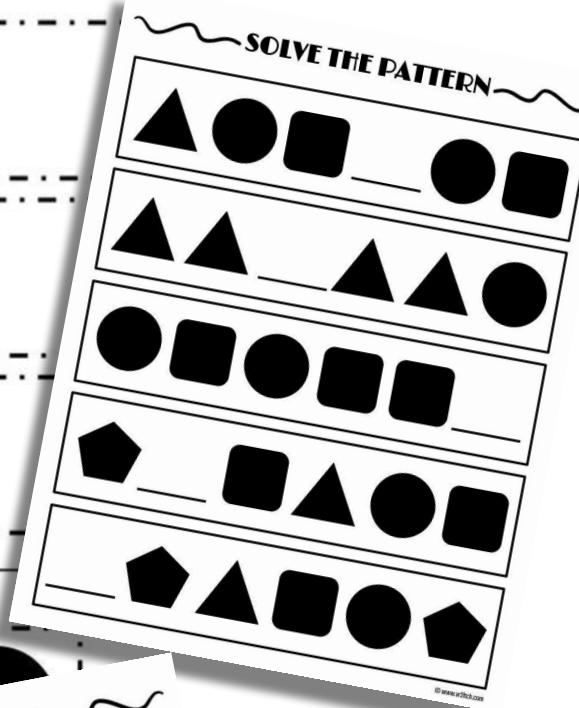
FINISH THE PATTERN



Cut the shapes. Then paste them to complete the pattern.



SOLVE THE PATTERN



CODING RIDDLES

I start with a "turn left" command, then a "move forward" command. Next, I have two "turn right" commands followed by a "move forward" command. Finally, I have three consecutive "turn left" commands. What is my next command?

I begin with a "move forward" command, then a "turn right" command. Next, I have two "move forward" commands followed by a "turn left" command. Finally, I have three consecutive "move forward" commands. What is my next command?

I start with a "move forward" command, then a "turn left" command. Next, I have two "turn right" commands followed by a "move forward" command. Finally, I have three consecutive "turn left" commands. What is my next command?

I begin with a "turn right" command, then a "move forward" command. Next, I have two "turn left" commands followed by a "move forward" command. Finally, I have three consecutive "turn right" commands. What is my next command?

SOLVE THE PATTERN

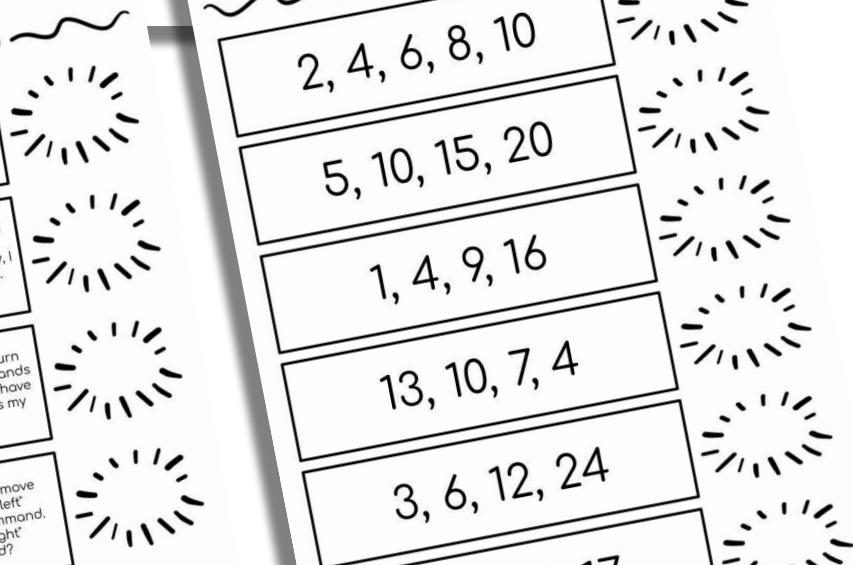
2, 4, 6, 8, 10

5, 10, 15, 20

1, 4, 9, 16

13, 10, 7, 4

3, 6, 12, 24



STUDENTS PRACTICE DECOMPOSING, OR BREAKING DOWN PROBLEMS. A NECESSARY CODING SKILL!

REVERSE ENGINEERING

Look at the picture below. Then draw a picture of (or write) how you think it works, or what the inside looks like to make it work.



BICYCLE

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REVERSE ENGINEERING

Look at the picture below. Then draw a picture of (or write) how you think it works, or what the inside looks like to make it work.



FAN

© www.wr2tch.com

REVERSE ENGINEERING

Look at the picture below. Then draw a picture of how you think it works, or what the inside make it work.



**ANALOG
ALARM CLOCK**

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REVERSE ENGINEERING

Look at the picture below. Then draw a picture of (or write) how you think it works, or what the inside looks like to make it work.



TELEPHONE

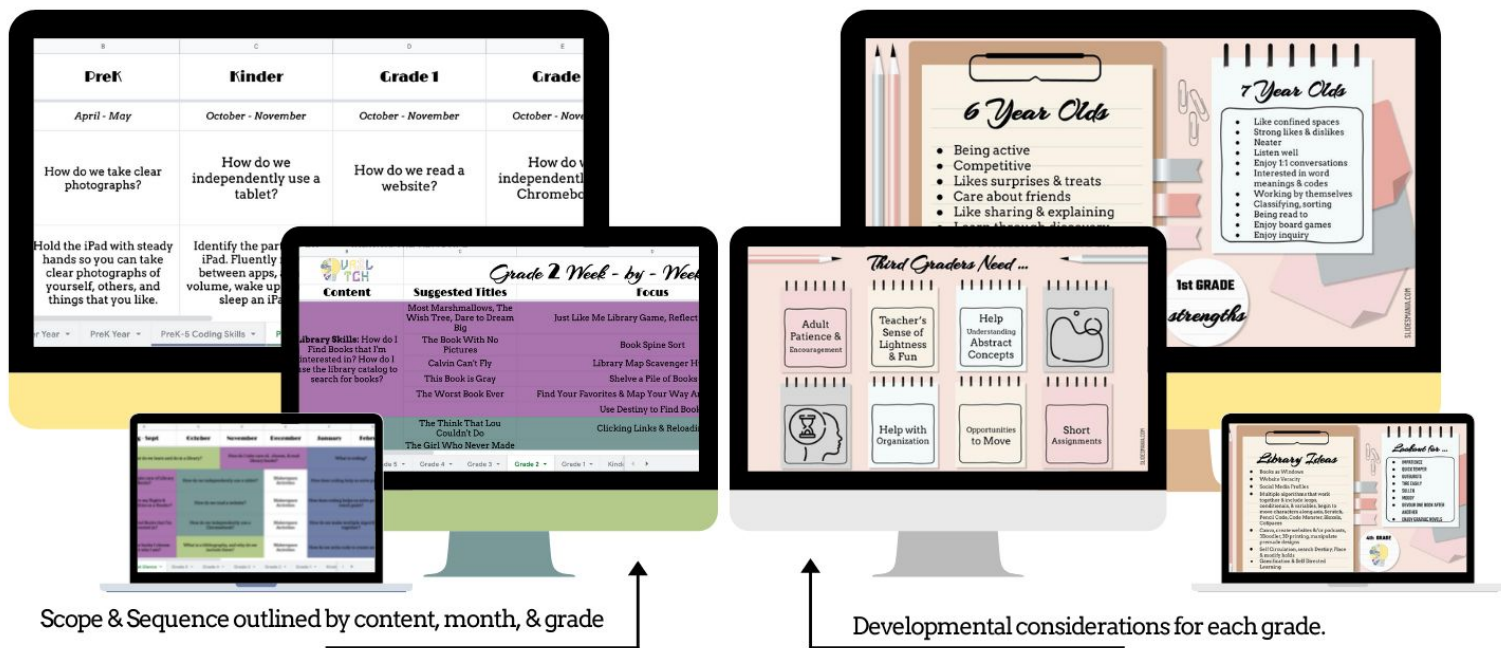
LANDLINE, NOT A SMARTPHONE

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COMPLETE

YEAR

PreK - 6



Scope LIBRARY Sequence

An outline of what to teach PreK - Grade 6 students.
 Laid out by content area, month, and grade level.
 Developmental Considerations for each grade; includes app & content suggestions.

PURCHASE NOW