

Coding with Cornell: Lists

Grade Level: Kindergarten

Common Core National Standards Alignment

- **RI.K.3:** With prompting and support, describe the connection between two individuals, events, ideas, or pieces of information in a text.
 - **SL.K.2:** Confirm understanding of a text read aloud or information presented orally by asking and answering questions about key details.
 - **L.K.5.A:** Sort common objects into categories to gain a sense of the concepts the categories represent.
 - **W.K.2:** Use a combination of drawing, dictating, and writing to compose informative/explanatory texts that name what they are writing about and supply some information.
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Lesson Objectives & Relevance

Understanding **lists** helps students develop **categorization and organization skills** in both daily life and coding. Recognizing **patterns and structure** in text supports reading development, while discussing illustrations deepens comprehension.

By the end of the lesson, students will:

- Listen to and engage with *Coding with Cornell: Lists* through discussion and guided activities.
 - Recognize rhyming words and patterns in the text.
 - Understand **lists** as a way to group information.
 - Participate in an activity where they sort and categorize objects into lists.
 - Express understanding by drawing or dictating their own examples of lists.
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Resources and Materials

- *Coding with Cornell: Lists* book
- *Coding with Cornell: Activity Workbook*
- Chart paper and markers

- Pre-created picture of common lunch items (e.g., fruits, vegetables, drinks, snacks, sandwiches).
 - Cut-out word cards for sorting lists
 - Pencils, crayons, and paper
 - Memory game cards with list items
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Vocabulary Words from the Text

- **List** – A group of items organized together.
 - **Order** – Arranging things in a structured way.
 - **Add** – To put something in.
 - **Remove** – To take something out.
 - **Organize** – To put things in a neat way.
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Lesson Introduction

- Have your students gather in a circle.
 - Write the word “list” on the board, then ask students to explain what they think a list is. Guide students to understand that **a list is a group of things that belong together.**
 - Ask your students to share different types of lists they have used (such as shopping lists or lists of chores).
 - Share that you’ll be reading *Coding with Cornell: Lists*, a book that will talk about lists in Python, which are ways of groups things together.
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Lesson Activities/Tasks

Activity 1: Read-Aloud and Discussion

- Read *Coding with Cornell: Lists* aloud, stopping at **list examples**.
- Pause and ask:
 - “What is a list?” (*A group of things that belong together!*)
 - “Name some lists you heard in the book.” (*Help students identify lists.*)
 - “What can you do with a list?” (*Help students understand that you can add items to list, remove items from lists, and put lists together.*)

Activity 2: Adding My Toy To The List

- Using the illustration of Cornell and his friends outside in the yard with three lists (Derek’s toys, Antonio’s toys, and All Toys), help students understand that the list Cornell is holding is a combination of the list of Derek’s Toys and Antonio’s Toys. Revisit the section of *Coding with Cornell: Lists* that explains:

We can add items to list
Or remove items when we’re done
We can put two lists together
Or take lists apart to make more than one

- Instruct students to draw an image of the box of toys they would add to the All Toys list.
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Activity 3: Organize My Lunch List

- Distribute the pre-created picture cards to each student or small group. Instruct students to **sort the cards into categories** such as “Fruits,” “Vegetables,” “Drinks,” and “Snacks.” Help the students understand that each of the sorted groups is a list.
 - After students have completed sorting, ask the following questions:
 - "Why did you put these items together?"
 - "Can you think of another way to sort these foods?" (e.g., by color, by what they like most, or by healthy vs. treat foods)
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Activity 4: Workbook Integration

- Have students complete several worksheets in the Coding with Cornell Activity Workbook as classroom and homework activities, including:
 - The Loops Book Cover coloring sheet
 - *Python Lists* coloring sheet
 - Three worksheets titled *Lists*

Lesson Conclusion & Assessment

Wrap-Up Discussion:

- “Who can tell me one **list** we made today?” (*Call on multiple students.*)
- “Why do **lists** help us?” *(Guide students to understand that **lists keep things organized.**)
- “How did the pictures help us understand the story?”