











Digital Technologies @ Home Unplugged activities for students



This activity is for: Years F-2

Robot Dance

With thanks to the South Australian Commissioner for Children and Young People, who developed this activity with the Australian Computing Academy for the Commissioner's Digital Challenge.

This activity teaches...

Students create a set of instructions for someone else to follow. Computers follow instructions when they perform many tasks (like opening an app or playing a video). The instructions given to computers are very clear so that every computer will follow the instructions in the same way. Instructions are also found in other places like recipes. Instructions are followed in order from start to finish. Instructions don't need to be written - they can be pictures, sounds and symbols.

These pictures, sounds and symbols are examples of how we represent things around us. For example, we might use to represent a book. It's not an actual book, but we understand that we are talking about books when we see this symbol. There are many examples of **representation** in our homes - symbols on our clothes tell us how to wash them, and packaged food in your pantry contains symbols to explain how healthy it is, or how to recycle packaging, to name a few. How many other examples can you find?

This activity is targeted towards students in years F to 4. The activity is expected to take 1 to 2 hours.

You will need...

- 2 printed sets of dance moves
- 1 dance card (use a piece of card from home, or a blank sheet of paper).
- For the advanced option, a Cody Buttons torso and body parts printout.
- Craft supplies, coloured pens, scissors and glue to decorate the Cody Buttons robot and attach it to the dance card.

Getting started (read this with your child):

- You will make your very own dance routine for our robot, Cody Buttons.
- Choose the pictures of Cody doing different dance moves and put them in the order you like best.
- Stick them to your Dance Card.
- Share the Dance Card with other people so they can do your dance!











This page is for



Step by step

- 1. Print the pages in this pack to suit your needs.
- 2. Cut out the dance moves depending on the age of the child, they might like to do this themselves.
- 3. Tell your child they can create their own dance routine by putting together a set of instructions. They will do this by putting the 6 moves from the print outs into their chosen order by sticking them to their base card (use glue or other method) to create their unique 'dance card'.
- 4. Children can further personalise their set of instructions by colouring or adding further craft materials to their 'dance card'.
- 5. Put on some of your child's favourite music.
- 6. Children can perform their dance themselves or present their 'dance card' to you / another family member or carer to perform the moves. Children are able to present their work by displaying their dance card if there are limitations on their movement.







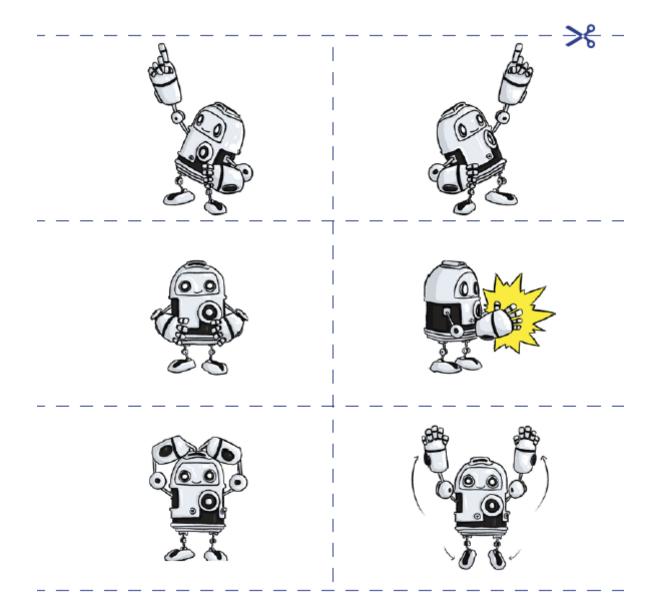






Create Cody Button's own dance: print out and cut up these moves.









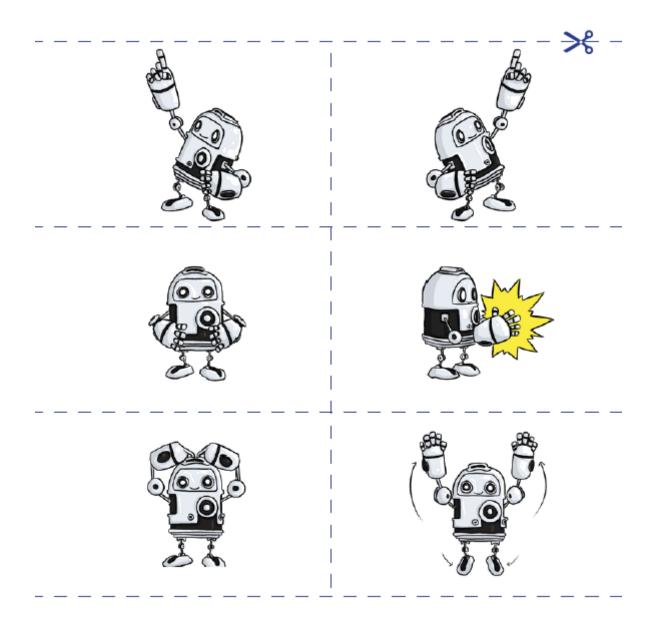






Create Cody Button's own dance.











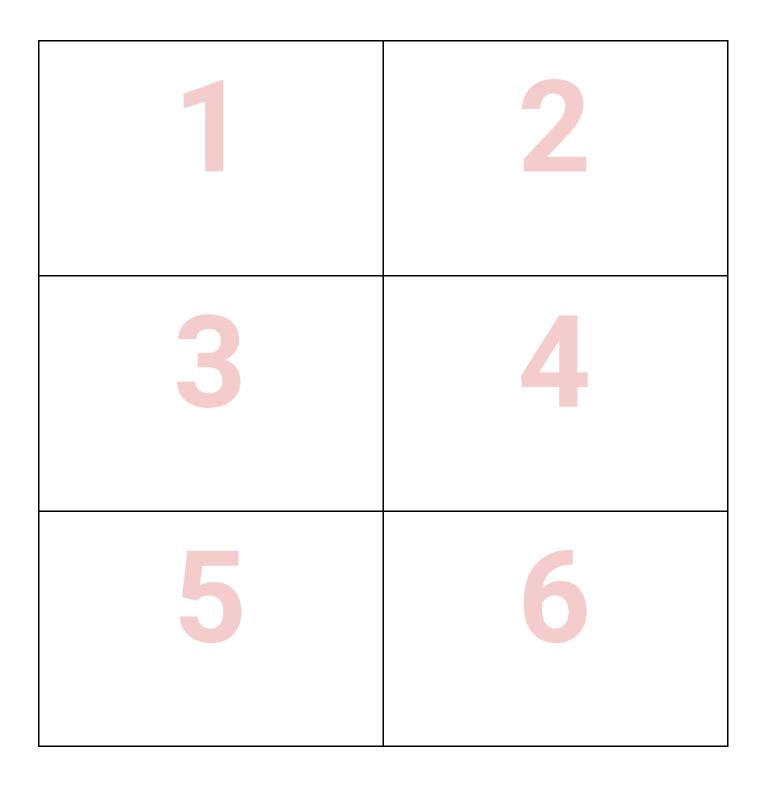




Glue your dance moves onto this dance card.



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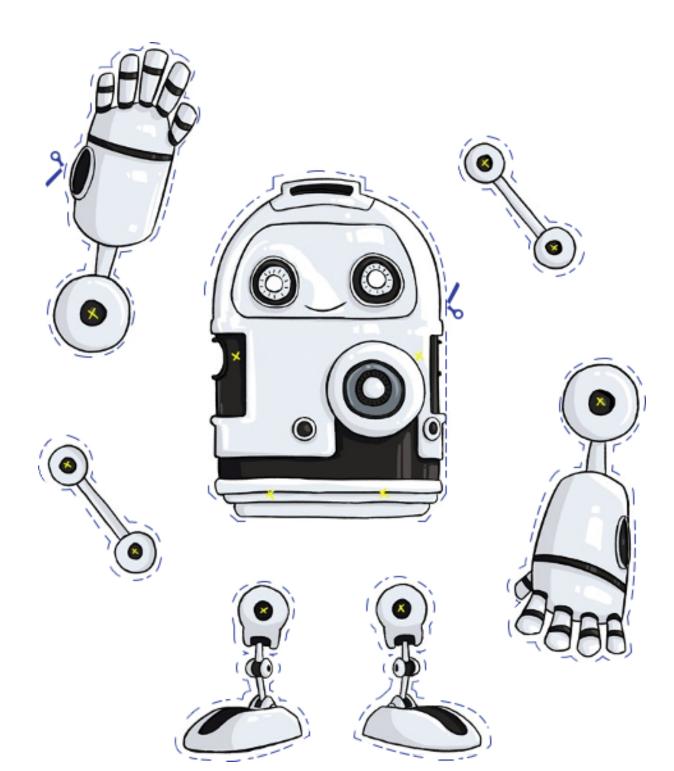








Use this page if you want to create a Cody Buttons with moveable arms and legs.





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This page is for

Want more?

Here are some further activities, online resources, assessment ideas and curriculum references.



Adapting this activity

As an extension, provide children with a template or multiple templates of Cody with detachable limbs that can be attached with butterfly clips to create custom dance moves.

If your child would like to create multiple repeats of the same move, they could write the number of repetitions on the card, or you could create discs with different numbers on them to add to each move as an additional part of the Challenge.

Keep the conversation going

- Was it easy or difficult to create a dance for Cody?
- When others performed your dance, did they do it in the way you expected?
- Are there other ways you could create a dance routine for someone else? (Children consider other ways maybe making a video?)
- How many dances could you create with these 6 moves? The same moves, in different orders, can create many different dances.
- Where else have you seen instructions with pictures? (Building blocks? Recipes?)
- How would you like to improve your dance?
- If your child did the extension activity using a Cody with moveable limbs, could a person actually do that dance move?

Keep learning

Dancing is an example of a small set of instructions that are repeated in different combinations. Students can explore using a set of instructions to control our favourite animal, the wombot, in an online activity available here: <u>cmp.ac/blockly-wombot</u>

Students can explore other symbols around the house by completing our DT Laundry unplugged activity: <u>cmp.ac/laundry</u>

For teachers creating a portfolio of learning or considering this task for assessment

Ask students to create a six step dance and submit their dance card, and if possible, demonstrate their dance.

Linking it back to the Australian Curriculum: Digital Technologies



Data representation: Recognise and explore patterns in data and represent data as pictures, symbols and diagrams (ACTDIK002 - see <u>cmp.ac/datarep</u>)

Refer to <u>aca.edu.au/curriculum</u> for more curriculum information.

