

JUNIOR SAINTS

ACTIVITY PLAN

AGES 7–11

PROGRAMMING

INTELLECTUAL CORE

Version 2026.1



Steps a Robot Can Follow

A program is a list of steps. Write one. Try it. Fix it.

🕒 60 minutes · one session

🎯 WALK AWAY WITH

- Has played the human robot game with a partner and run his steps.
- Has spotted one bug in a broken list of steps.
- Has written four steps for a small task in his own hand.
- Knows that a program is a list of steps in the right order.

📦 BRING / SET UP

- Two paper plates, a slice of bread, peanut butter or jam, and a child-safe spreader for the sandwich-robot game.
- A printed card with a broken list of steps. The leader has the bug answers in his head.
- Paper and a pencil for each Junior Saint.
- An open space to walk three or four steps forward, back, left, right.
- Water for each youth.

FOR THE LEADER

This is a Junior Saints preview of the **Programming** badge. No advancement credit is earned here — the goal is to introduce these concepts to Junior Saints alongside the older Saints Global youth working the full BRC. The 4-session Saints Global arc lives under *Activity Plan (SG)* in the BRC builder.

STEPS A ROBOT CAN FOLLOW (PAGE 1 OF 2)

THE HOUR

BLOCK 1 · DISCUSSION **Opener — Welcome circle**

⌚ 5 min

Stand in a circle. Each Junior Saint says his name. Then he names one machine that follows steps. Examples: a microwave, a washing machine, a video game, a toaster. The leader goes last. Keep each turn short.

BLOCK 2 · ROLEPLAY **The human robot game**

⌚ 12 min

1. Pair up. One youth is the robot. The other is the programmer.
2. The programmer gives one step at a time. The robot does exactly what he is told.
3. Step words can be: walk forward two steps. Turn left. Stop. Raise your right hand.
4. The goal: get the robot to walk to a chair and sit down. No other words.
5. If the robot bumps a chair, the program has a bug. Try again.
6. Switch. The robot becomes the programmer.
7. Teaching point: a robot only does what you tell it. You have to be clear.

BLOCK 3 · SKILL PRACTICE **Steps to make a sandwich**

⌚ 12 min

1. The leader sits at the table. He is now a robot too.
2. Each Junior Saint takes a turn telling the robot one step.
3. The leader does ONLY what the youth says. No more.
4. If a youth says 'put peanut butter on the bread,' the leader holds the jar. Where does it go?
5. The youth has to say: open the jar, scoop with the spreader, spread on the bread.
6. Keep going until the sandwich is built and on the plate.
7. Teaching point: every step that you skip, the robot will miss too.

BLOCK 4 · DISCUSSION **Find the bug**

⌚ 13 min

1. Sit in a circle. The leader holds up the card with a broken list of steps.
2. The list is: 1. Put on your shoes. 2. Tie your shoes. 3. Find your shoes.
3. Read it out loud one time. Slow.
4. Ask: can a robot do these steps in this order? What goes wrong?
5. Take three answers. The right answer: you cannot put on shoes you have not found.
6. Now the youth fix the list. Find. Put on. Tie. That is the right order.
7. Try one more: 1. Drink water. 2. Pour water in cup. 3. Open the water bottle.
8. Fix it together. The right order matters more than the words.
9. Teaching point: finding the bug is half the job of a programmer.

STEPS A ROBOT CAN FOLLOW (PAGE 2 OF 2)

☰ THE HOUR — CONTINUED

BLOCK 5 · CREATIVE **Write your own steps**

🕒 10 min

1. Sit at the table. Each youth gets paper and a pencil.
2. Pick one small task. Examples: brush your teeth. Pack a lunch. Pet the dog.
3. Write four steps in order. Number them 1, 2, 3, 4.
4. Write step 1 first. Then read it out loud. Does it work?
5. Trade papers with a partner. Read his steps. Can you follow them as a robot?
6. If a step is missing, tell your partner. He adds it in.
7. Teaching point: clear steps come from doing the task slowly in your head first.

BLOCK 6 · REFLECTION **Close — Stretch and cheer**

🕒 8 min

1. Stand in a circle. Reach high. Touch your toes. Hold each for ten seconds.
2. Drink water.
3. Each Junior Saint says: 'My task was ____.' Just the task name.
4. Group cheer: 'Steps in order!' Three times.
5. Homework: read your steps to a parent. See if he can follow them as a robot.

🗨 AT THE CLOSE · DEBRIEF

1. What task did you write the four steps for?
2. What was the bug in the shoe list?
3. When you were the robot, what step was hardest to follow?

📝 *This is a Junior Saints preview session. No Programming BRC requirements are earned here — the goal is to introduce the concepts the older Saints will work on.*

Find the Bug

Print and hold up while the youth try to find the bug.

PROGRAMMING · JUNIOR SAINTS CARD

Find the bug.

A robot does the steps in order. If the order is wrong, the robot gets stuck.

1 Put on your shoes

Read these steps to a robot. What goes wrong?

1. Put on your shoes.
2. Tie your shoes.
3. Find your shoes.

BUG: your shoes are not here yet.

The right order:

1. Find your shoes. 2. Put on your shoes. 3. Tie your shoes.

Now the robot can do every step.

2 Drink some water

Same job. Different bug. Find it.

1. Drink the water.
2. Pour water into your cup.
3. Open the water bottle.

BUG: the cup is empty.

The right order:

1. Open the bottle. 2. Pour into your cup. 3. Drink the water.

Each step needs the step before it.

A rule for finding bugs:

Read each step out loud. Ask: can the robot do this step right now?

If the answer is no, the bug is in the step before.

A program is a list of steps. The order matters as much as the words.