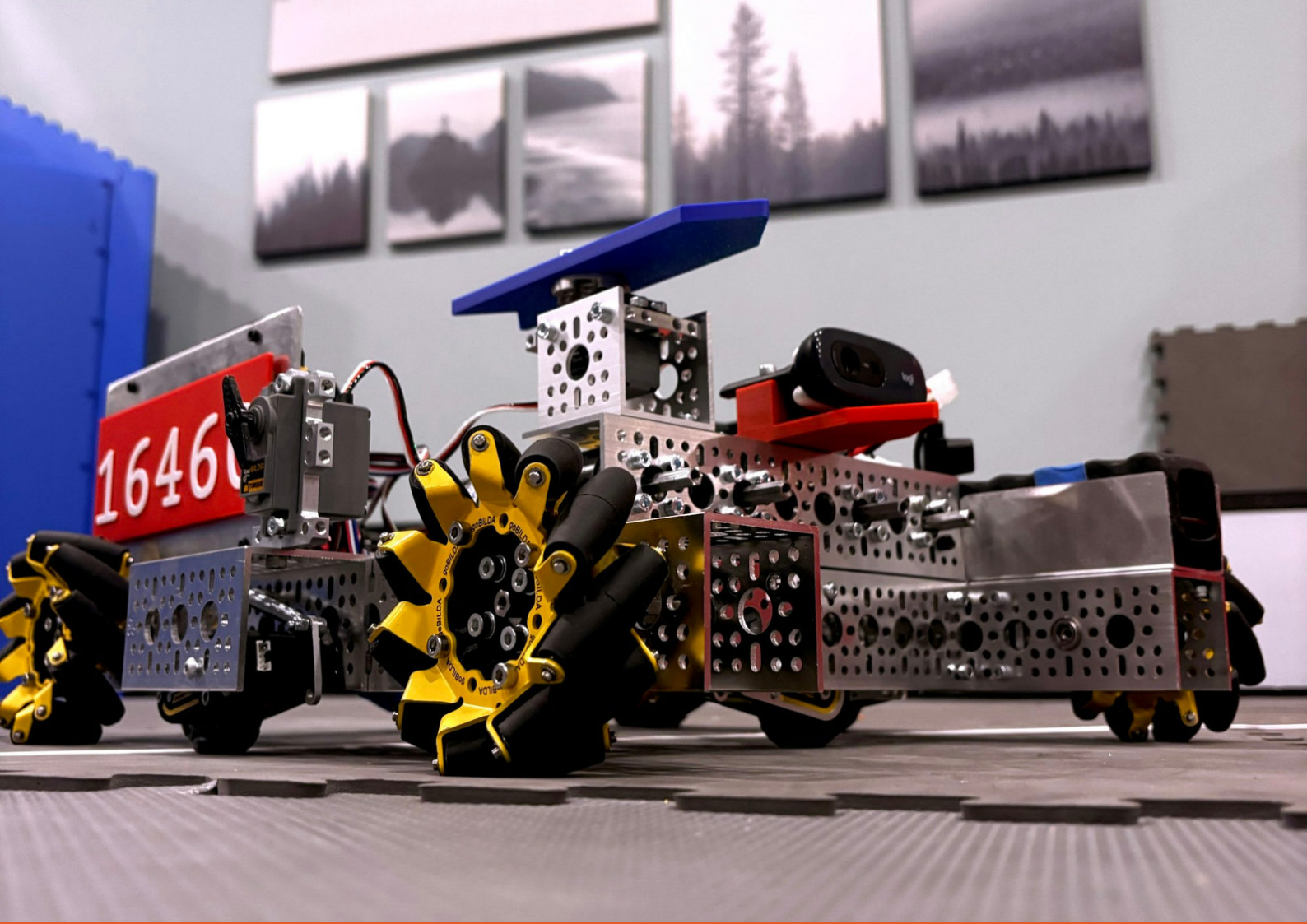




EduTrend Contents

EDUTECH · ROBOTICS COMPETITIONS AND CHALLENGES · MIDDLE SCHOOL

Taster Challenge

Three tasks, 2.5 minutes per run: try a competition before committing

Ages 10–14

Level: Intermediate

2 × 60 minutes

Teams of 3 · up to 30

Activity 03

Inside: activity at a glance · step-by-step session plan · facilitator notes · 3 student worksheets · assessment checklist

ACTIVITY 03 · AT A GLANCE

Taster Challenge

Each team of three gets a robot kit, a taped arena and three tasks of different point values, such as pushing a block into a zone or stopping on a line. In the first session teams build and program; in the second they have three runs of 2.5 minutes. Teams reflect on pressure, teamwork and what support they would need.

Learning outcomes

By the end of the session students can:

- build and program to a brief;
- perform under time limits;
- improve between runs;
- reflect on competition readiness.

KEY WORDS

taster · arena · task · run · time limit
· readiness

CURRICULUM LINKS

PSHE: managing pressure. Maths: scoring. D&T: design under constraints.

1**SENSE**

What can it detect?

2**THINK**

What should it decide?

3**ACT**

What should it do?

4**TEST**

Run it

5**DEBUG**

Find and fix

6**IMPROVE**

Make it better

Materials (per team)

- Robot kits
- Taped arena
- Blocks and markers
- Timer
- Worksheets 1, 2 and 3

Before the session

- Tape an arena.
- Write three tasks with points.
- Check kits.
- Print worksheets.

SAFETY

Keep the arena clear during runs. Only one team member handles the robot.

ACTIVITY 03 · SESSION PLAN

Step by step

Watch which students enjoy the pressure and how much support teams need.

Time	What happens	Say or ask
S1: 0–10 min Brief	Tasks, points and rules.	<i>“What will you attempt?”</i>
10–60 min Build and program	Prepare the robot.	<i>“Is it reliable?”</i>
S2: 0–15 min Practice	Final checks.	<i>“What is your start position?”</i>
15–45 min Runs	Three 2.5-minute runs.	<i>“What changed?”</i>
45–60 min Reflect	Readiness discussion.	<i>“Would you enter a real event?”</i>

CHALLENGE CARD (print or copy onto the board)

Build and program a robot for three tasks, complete three 2.5-minute runs, improve between runs and reflect on competition readiness.

ACTIVITY 03 · FACILITATOR NOTES

The competition know-how in brief

A short in-school trial shows which students enjoy competition and how much support they need before registering for a real programme.

Programmes such as FIRST LEGO League, the World Robot Olympiad and VEX Robotics competitions publish new challenges each season, so teams should always check current official rules.

Common ideas to listen for

- “Competitions are only about winning.” Learning and teamwork count.
- “The first run shows your best.” Teams improve between runs.
- “Adults should fix problems.” Students should build and code.

Adapting the activity

Support

Offer a starter program.

Stretch

Attempt all three tasks in one run.

WORKSHEET 1

Task plan

Name: _____

Class: _____ Date: _____

Plan tasks.

Task plan

Task	Points	Method
1		
2		
3		

WORKSHEET 2

Runs

Record runs.

Runs

Run	Tasks completed	Points	Improvement
1			
2			
3			

WORKSHEET 3

Readiness

Reflect as a team.

Are we ready for a real competition? Why?

FOR THE TEACHER

Assessment checklist

Use during the session. One sheet covers up to eight students; copy as needed.

Student	Builds to brief	Improves between runs	Reflects honestly

Suggested codes: W = working towards · E = expected · G = greater depth

ABOUT THIS ACTIVITY

Taster Challenge is a sample activity from the EduTrend Contents Edutech Robotics Competitions and Challenges programme (middle school, level: intermediate). Every activity in the programme follows the same format: a practical challenge, a clear session plan, facilitator notes and ready-to-print worksheets, so that teachers, club leaders and parents can run it without extra preparation.

Full 15-, 20- and 32-week programmes are available from EduStore at edutrend.org.

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