

RUGGED ROBOT CHALLENGES

Deliver fun cross-curricular challenges in a fun, hands-on, playful way. Ideal for children to use independently or as a group, in lesson time or at a computing club.

Just print and laminate these cards and allow children to explore and learn with Rugged Robot, both indoors and out *(not suitable to be left outdoors)*.



A few top tips:

- Make sure Rugged Robot has enough charge. The charge level is indicated by the LED ring on the top of the robot.
- If using the Rugged Robot App ensure your tablets are charged and ready to go.
- When starting a new algorithm remember to press the cancel button to clear the memory otherwise any new instructions will be added to the previously stored routine.

OBSTACLE CHALLENGES

Can you set up an obstacle course for your Rugged Robot?



- You could include tunnels, bridges and other obstacles to overcome.
- Maybe you can create characters for Rugged Robot to meet along the way!
- Why not include and test Rugged on different terrains and surfaces? Use the Mode Selector depending on the terrain. The higher the mode, the more rugged the terrain.
- Use a stopwatch or timer to time how long your Rugged Robot takes to complete your course.
- Keep a logbook of the challenges Rugged Robot completes.

STRICTLY COME ROBOTS



Create a synchronised dance routine for your Rugged Robot or a group dance with more Rugged Robot friends.

- Can you get Rugged Robot to move in time with the music?
- Make your own costume for Rugged Robot to wear.
- Why not record your dances for others to see?
- Don't forget: Your robot can store 256 steps, can turn 45 degree turns and can travel 20cm for each step. You can also use the 'repeat' function for your commands

Have fun and ... Keep dancing!



MISSION IMPOSSIBLE



Set up your own Mission Impossible Challenge with obstacles for Rugged Robot to avoid.

- You can use the built-in sensors so that Rugged Robot can detect objects, rotate and continue its journey.
- Make some rewards for Rugged Robot to collect on its journey and bring back in the built-in storage area.
- Will your Rugged Robot complete its mission?
- Use a stopwatch or timer to time how long your Robot takes to complete. Is there a way to change the route to speed up Rugged's journey time!

Record your commands for Rugged Robot using the voice command button. Play the Mission Impossible music as your robot completes its task.



GET INTO SHAPE!



Can you programme Rugged Robot to draw different shapes in the sand?

- Write programs to create different shapes and debug codes that are not accurate.
- Rugged Robot uses 45° turns, able to draw quite complex shapes.
- Work in multiples of 20cm as every directional press is 20cm.

**Have fun outside and
get your Rugged Robot
into Shape!**



RUGGED ROBOT ADVENTURES



Take Rugged Robot on different adventures!

Use a Rugged Robot Mat or why not create one of your own.

Examples:

- **Working on the Construction Site** - Can you get Rugged Robot to help transport items around the construction site?
- **One small step for man, One giant leap for mankind Moon Mat** - Take Rugged Robot on a Lunar adventure. What could it find or collect while exploring?
- **Ahoy there! Pirate Adventure** - Where is the treasure hidden? Get Rugged Robot to explore the island and hopefully bring back the hidden treasure !
- **Fishy Business Under-the-sea journey** - Explore sealife and get Rugged Robot to collect items along the way to research further.
- **Once upon a time Story Map** - Navigate Rugged Robot through a story map. What characters could it meet?

Rugged Robot has a built-in storage area to hold and transport small items, ideal for any Robot Adventure! Write a Rugged Robot Adventure story. Photograph the adventure for your illustrations or record adventures to make a short film.

