ROBOTS

Student Activity Pack

Name:

Group:

Student Robot Workbook

Activity 1 - Designing My Own Robot - Student Activity

1. In the space below, draw a sketch of your robot design.

2. Label all the recyclable materials you will use.

3. What will your robot be used for?

Rules

- Only use the materials provided by you or the school.
- You must use your original design
- Your goal is to make a robot that can do a task.
- Have fun and be creative.

Student Robot Workbook

Activity 1 - Student Feedback Sheet

1. Were you successful in this activity (yes/no) and explain why?

2. What was the most difficult part of the activity – explain your answer?

3. What task can/should your robot do?

4. What did you learn about structures and mechanics by doing this activity?

Student Robot Workbook

Activity 2 – Draw/Doodle/Scribble Bots - Group activity

1. In the space below, draw a sketch of your Draw/Doodle/Scribble Bots design. This robot needs to be designed to complete a specific task - drawing.

2. Label all the recyclable and other materials you will use.

Rules

- Only use the materials provided by you or the school.
- You must use your original group design
- Your goal is to make a draw/doodle/scribble bot that can create art.
- Use as many of the resources as you need including 3 - 5 felt pens.
- Have fun and be creative.

Student Robot Workbook

Activity 2 - Student Feedback Sheet

1. Was your group successful in this activity (yes/no) and explain why?

2. What was the most difficult part of the activity – explain your answer?

3. What tasks can/should your draw/doodle/scribble bot do?

4. What did you learn about structures and the mechanics of this activity?

Student Robot Workbook

Activity 3 - Bristle Bots Bugs - Student activity

1. In the space below, draw a sketch of your Bristle Bots design.

2. Label all the materials you will use.

3. Make your own Bristle Bot be as creative as you like. You can add pipe cleaners, felt and wiggly eyes but remember if it is too heavy it will not move.

4. Give your Bristle Bot a name.

Rules

- Only use the materials provided by you or the school.
- You must use your original design
- Your goal is to make the fastest Bristle Bot for the next activity.
- Have fun and be creative.

Student Robot Workbook

Activity 3 - Student Feedback Sheet

1. Was your group successful in this activity (yes/no) and explain why?

2. What was the most difficult part of the activity – explain your answer?

3. How quickly does your bristle bot move – does it move in one direction or around in circles? Can you change your design to make it move in different directions?

4. What did you learn about structures and mechanics by doing this activity?

Student Robot Workbook

Activity 4 – Bristle Bot Track Activity - Group activity

1. In small teams using the recycled materials available design and create your very own Bristle Bot race track with 4 lanes.

2. In the space below draw a sketch of your Bristle Bot race track design.

3. Label all the recyclable and other materials you will use.

Rules

- Only use the materials provided by you or the school.
- You must use your original group design
- Your goal is to make a race track with 4 lanes.
- You cannot change your bristle bot it must be the original design.
- Have fun and be creative with your race track design.

Student Robot Workbook

Activity 4 - Student Feedback/Evaluation Sheet

1. Was your group successful in this activity (yes/no) and explain why?

2. What was the most difficult part of the activity – explain your answer?

3. What was the best idea your team came up with?

4. What did you learn about structures and mechanics by doing this activity?

Student Robot Workbook

Activity 5 - Other Robot Designs - Student Activity

1. Design adapt/make your very own robot and add LED's to the design.

2. In the space below, draw a sketch of your robot design.

3. Label all the materials you will use.

4. Where will you add the LED's?

Rules

- Only use the materials provided by you or the school.
- You must use your original design
- Your goal is to make or adapt a robot that has LED's in the design
- Have fun and be creative.

Student Robot Workbook

Activity 5 - Student Feedback Sheet

1. Were you successful in this activity (yes/no) and explain why?

2. What was the most difficult part of the activity – explain your answer?

3. Did your circuit work? If not why do you think this was?

4. What did you learn about circuits by doing this activity?

Student Robot Workbook

Title of activity	Tick	RAG
Activity 1 - Designing My Own Robot - Student Activity		
Activity 1 - Student Feedback/Evaluation Sheet		
Activity 2 – Draw/Doodle/Scribble Bots - Group activity		
Activity 2 - Student Feedback/Evaluation Sheet		
Activity 3 - Bristle Bots Bugs – Student activity		
Activity 3 - Student Feedback/Evaluation Sheet		
Activity 4 – Bristle Bot Track Activity - Group activity		
Activity 4 - Student Feedback/Evaluation Sheet		
Activity 5 - Other Robot Designs – Student Activity		
Activity 5 - Student Feedback/Evaluation Sheet		

Tick and RAG rate once you have completed each activity.