

# - Marble Racer Hack

The desktop version of Scratch (version 1.4) contains a variety of ready-made examples of games, animations and projects that have been created by others. Some of these examples are rather basic and would benefit from improvements. The aim of this activity is to show learners that they can take a simple idea and develop it into something more sophisticated.

## This activity should develop:

- **Analytical Skills:** Through playing existing games, learners are provided with opportunities to identify the strengths, weaknesses and potential improvements.
- **Practical Problem Solving:** Learners work together to make the changes that they suggest.
- **Creative Collaboration:** Through working in pairs/teams, learners develop the capacity and confidence to create outcomes they might not have achieved on their own.

## - Steps for the Activity

*While this activity can be taken by learners on their own, there is more potential for creativity if learners collaborate in pairs or small groups.*

1. As part of the introduction to this workshop, the Activity Leader first introduces the Scratch Marble Racer game to learners and invites them to discover who is the most proficient at playing the game. Learners are also asked to identify strengths/weaknesses of the game as they take it in turns to play.
2. After a few minutes of game play, the Leader asks each group to share their opinions of the game including suggestions for potential improvement/changes to the game.
3. The Activity Leader then asks each group to start developing the game adding in the improvements/modifications that have been suggested. Ideally, pairs should work in driver/navigator mode swapping at 3-5 minute intervals.
4. It is highly likely that some pairs/groups will wish to implement developments and modifications that are more ambitious than they have the capacity to implement. Direct these groups to the wealth of support shared online by members of the Scratch community. As well as the support available online, in version 1.4 you can right-click on any block for context specific help.



*With Marble Racer, you can design and play your own race track - introducing different obstacles and challenges to make it more difficult.*

5. **Sharing** - Allow a period of time before the end of the workshop activity for groups to share their creations with the others.

An alternative to presenting to the whole group would be to nominate one person from each group to remain with the project while other members of the group travel around to discover what the others have created. On return to their base, the travellers should report back on what they saw.

### Materials

- Essential - A computer with a modern browser, eg. Chrome or Firefox
- Essential - The bookmarks toolbar to be enabled in the browser

### Discussion

- What are the weaknesses in the way the game has been constructed?
- What weaknesses are there in the way the game has been designed?
- What possible improvements could be made?
- Which improvements would make the game more enjoyable, more engaging, less tedious, more competitive, suitable for a different audience or situation?
- Where could you find help to make these improvements?

### Related Links

- [Scratch Website](#)
- [Marble Racer - Online Version](#)
- [Download Scratch 1.4](#)
- [Scratch Help Cards](#)
- [Scratch Help](#)