Balloon Railway Switch

HOST ONLY - preparation and story

Includes answers. Keep these pages with an adult.

The birthday team has arrived, but one important part of the celebration is missing. Choose the railway switch card that sends the birthday train home. Collect five named badge digits, then use the final sheet to finish your mission. All the clues you need are printed here. Work together and ask for a hint whenever you want.

1. Print one player pack and two record sheets per team. Keep the host answers and all three hint levels with the adult.

2. Keep every clue as a full sheet at one table. Put the final sheet face down until all five results are recorded. Nothing needs cutting, folding or hiding.

3. Give each child a pencil. Choose a reader, recorder and checker, and swap jobs after each clue. Use one team for 2-4 children or two teams for 5-6.

Players: 4; teams: 1. Print one player and prop set per team. Invitations and certificates: 4 each.

No locks, purchases or cutting required. Keep all clues at a low table. Scissors are optional and for adults only.

Balloon Railway Switch

HOST ONLY - solution guide

1. Track: 6

Trace the orthogonal path from S; the other exits are separated by walls.

2. Switch: 7

A fails striped; C fails not-round; only B meets all three requirements and gives 7.

3. Station: 0

Locate the single BOOK occurrence. The next cell contains the badge digit; other letters are filler.

4. Route: 9

Move exactly one orthogonal square per arrow; copy only the value at the endpoint.

5. Signal: 2

Replace every symbol with its letter, including repeated symbols. Convert the decoded word using the printed table.

6. Final: 02027

candidate-elimination: Compare all five clue digits against each row; only Parcel A matches.. Keep leading zeroes.

Balloon Railway Switch

HOST ONLY - timeline and paper check

3 minutes: Read the opening story and explain the badges.

5 minutes: Solve Track; offer one hint at a time.

5 minutes: Solve Switch; offer one hint at a time.

5 minutes: Solve Station; offer one hint at a time.

5 minutes: Solve Route; offer one hint at a time.

5 minutes: Solve Signal; offer one hint at a time.

5 minutes: Combine the badges on the final sheet.

2 minutes: Read the ending and award certificates.

Paper completion: check each badge against the solution guide, then check the final code. No device is required.

Mission complete! Balloon Railway Switch is ready for its birthday celebration. Thank your team for sharing ideas and helping one another.

Duration and ages are estimates. Adjust pace and offer help for your group.