

# Tutor Instructions: Finite State Automata

Each group of students is given a piece of paper with a Harry Potter related sentence on it (e.g. "*I pledge my allegiance to the Dark lord to avenge Lily*"). They then follow the instructions on the chamber posters until they arrive at the final chamber which will give them an answer phrase.

There are 3 puzzles for them to solve - Green, Red and Blue. Students will find an answer phrase, and create a node map for each labyrinth.

## Tutor assistance:

### Setup

- Some tutors will be needed to help blue-tack the chamber posters around the foyer. Make sure to mix up the Green, Red and Blue chambers to create a more challenging path

### Handout materials

- Some tutors will be needed to hand out materials to the student groups and point them to their starting chamber. Each group will need a sentence and pens
  - Green: starts at *chamber 1*
  - Red: starts at *chamber A*
  - Blue: starts at *chamber Z*

### Check answers / assist

- Roam around and see if any groups need help. Encourage students to work as a team.
- Students can come to you to verify their answer. Answer sheets can be found at the front of the room.
  - If their answer is correct, they can get a sentence for the next coloured chamber. Tell them/point them to the starting chamber for that colour.
  - If they have finished all 3 puzzles, get them a map from the front of the room. They should fill in the nodes/pathways to map out the labyrinth.
  - If they have completed all of the above, suggest an extension

### Extensions

- Trying to make a fully connected node map based off the posted signs
- Trying to find the shortest route from the start to a specific answer
- Trying to concoct other sentences that will result with an answer
- etc.