

The Challenge

You are a young wizard studying at a famous Magic Academy. One morning, you see that your friend has a strange problem. Everything she says is the opposite of what she actually means, and in terms of her movement, every time she wants to turn left, her body goes right instead! She is having a hard time, since she can't make it to any of her classrooms, and classmates and teachers are confused every time she speaks.

Your friend keeps opening the door as if she's leaving, then closing it, saying, "I don't want to go home! No, I mean I really *don't* want to go home!" You know she has the dreaded "Curse of Reverse," which you've studied in school.

Curses can become permanent if not treated quickly. So you need to find a potion that will lift the curse as soon as possible. You think you can figure out how to do this, but you aren't quite sure what to try first. Consider the tasks and questions listed on page 2 and 3, as well as the map on page 4, to help you decide which actions you should take so that you can best help your friend. Then on page 5, write out your plan for completing the tasks, and add up your time to see how well you did.

There is no one right answer to this challenge—your goals are to (1) use good decision-making and planning skills and (2) complete the task as efficiently as you can. When we are **efficient**, it means that we save time and effort whenever possible. Remember, though, that a plan that takes a few minutes longer may be a better plan if you had good reasons for choosing to complete tasks in certain ways.



The Tasks

Here are the tasks you must complete in order to help your friend. You can choose one or more methods to complete each of the five tasks.

Task		Methods	Location	Time Needed for Task (DOES NOT include travel between locations)
1.	Get potion recipe	 Search recipe books for potions that might lift the "Curse of Reverse" 	Spells Library	30 minutes
		b. Ask alchemist (potion expert) for potion recipe ideas	Alchemist's Store	15 minutes
		c. Experiment with different combinations of potion ingredients to come up with your own recipe	Potions Laboratory	1 hour
2.	Get potion ingredients	a. Gather (free) ingredients that can be used to make potions	Enchanted Forest	1 hour
		b. Purchase potion ingredients	Magic Emporium	30 minutes
3.	Make potion	a. Mix the potion yourself	Potions Laboratory	1 hour
	petteri	b. Have the alchemist mix the potion	Alchemist's Store	30 minutes
4.	Get potion to friend	a. Carry the potion to your friend	Magic Academy	30 minutes
		b. Give the potion to a "Winged Messenger" that will fly it to your friend	Enchanted Forest	15 minutes



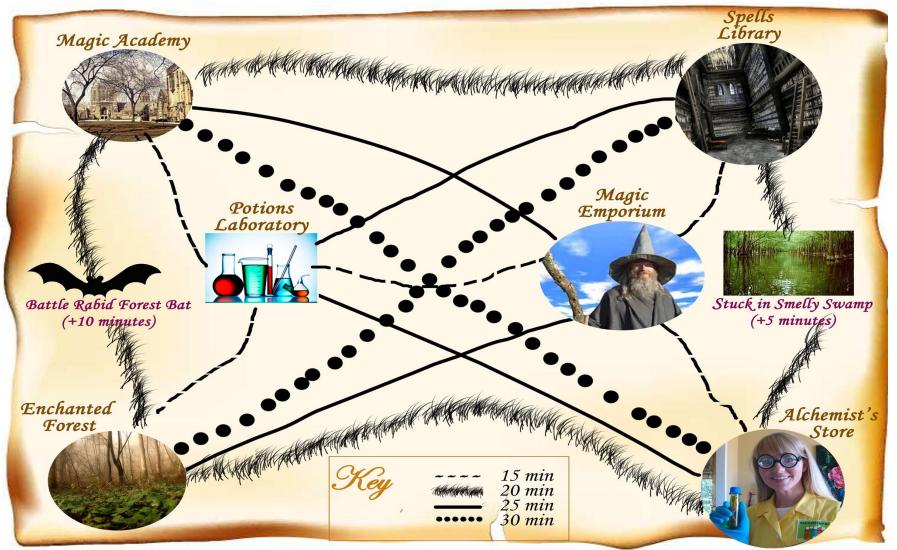
Ouestions to Consider

You have several choices about how you complete the four tasks. When choosing your methods, consider the following:

- 1. How long will it take to do the task PLUS travel to my next desired location? NOTE: **task times** appear in the Task Options table on page 2, and the map key on page 4 indicates **travel times** associated with different types of dotted lines that connect various locations. Watch out—along some of the travel routes, there are dangers that could cost you extra time!
- 2. Will you simply choose the method that takes the least amount of time, or do you have a good reason for choosing to do a task in a different way, even though it might take a little longer?
 - For example, you might save money by gathering free potion ingredients from the forest, but there might also be needed ingredients that do not grow in the forest and must be purchased from the alchemist. In this case, it might make sense to get all your ingredients from the alchemist, even if this costs extra money and adds extra time to your schedule.
- 3. Once you complete one step in the process, try to imagine what will happen next. Are there any challenges or problems that could occur if one method of accomplishing a task is chosen over another?
 - For example, giving the potion to a Winged Messenger instead of carrying it yourself might save time, but might also be less safe. What if the messenger gets delayed or trapped by an enemy, and the potion does not make it to your friend?

Use the table on page 5 to record information about the methods you've chosen to accomplish the tasks. Make sure you've added the task and travel times correctly, and that you have a good reason for each method you've chosen.







Your Plan

Use the following table to write information about the methods you've chosen to do the tasks.

Task	Method(s) I Will Use to Complete	Reasons for Choosing	TASK Time Needed (in minutes)	My Location Now	Where I Need to Go Next	Travel Time Needed (in minutes)	TOTAL Time Needed for Task + Travel (in minutes)	Time Used So Far
Get potion recipe								
Get potion ingredients								
Make potion								
Get potion to friend								
GRAND TOTAL of Time Needed:								