$\qquad$

## The Bridge of Destiny Math Riddle



Four travelers on a quest must cross a fragile bridge to continue their journey.
No individuals can cross the bridge without the Destiny Gem close by, which, fortunately, they have in their possession.

If, at any time, more than two individuals walk on the bridge, it will collapse.
Each traveller moves at a different pace and it will take each traveller the following amount of time to cross the bridge:

Sorceress: 1 minute, Archer: $\mathbf{2}$ minutes, Warrior: 5 minutes, Wizard: $\mathbf{8}$ minutes
When two travelers cross the bridge together, they must move at the slower person's pace.

What is the shortest time needed for all four travelers to cross the bridge?

Key: 15 minutes

| Elapsed Time | Starting Side | Action | Ending Side |
| :---: | :---: | :---: | :---: |
| 0 minutes | Sorceress <br> Archer <br> Warrior <br> Wizard |  |  |
| 2 minutes | Warrior Wizard | Sorceress and Archer cross the bridge with the Destiny Staff, taking 2 minutes | Sorceress Archer |
| 3 minutes | Sorceress <br> Warrior <br> Wizard | Sorceress returns back with the Destiny Staff, taking 1 minute | Archer |
| 11 Minutes | Sorceress | Warrior and Wizard take the Destiny Staff and cross, taking 8 minutes | Archer Warrior Wizard |
| 13 Minutes | Sorceress <br> Archer | Archer returns back with the Destiny Staff, taking 2 minutes | Warrior Wizard |
| 15 Minutes |  | Sorceress and Archer cross the bridge with the Destiny Staff, taking 2 minutes | Sorceress Archer Warrior Wizard |

