

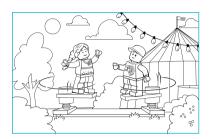
Main Activity: Crazy Floors

Name(s):

Date and subject:

Main Activity: Crazy Floors

Learner Worksheet



1. First, build Crazy Floors Model D6 and make it turn. Follow Building Instructions D. pages 34 to 54

Follow Building Instructions D, pages 34 to 54, steps 1 to 22.

Note: Make sure Sam and Sally are placed as shown on the model.

- 2. Count the number of pulley wheels on the model.
- 3. Then look carefully at the pictures of the models and compare Crazy Floors Model D6 to Crazy Floors Model D7.
 - · Circle what is different.
 - What do you notice? Explain how the models are different.

4. Next, look carefully at the pictures of the models and make a prediction.

If I compare model D6 to model D7, then I think Crazy Floors Model (D6 / D7) will show the larger difference in turning (speed of rotations) between Sam's side and Sally's side.



D6





5. Test Crazy Floors Model D6.

• If you want Sam or Sally to make a full turn, how many times must you crank the handle?

Write down your answer.

Remember to try at least three times for a fair test. It is important to keep an eye on a) where your handle start position is and

- b) where Sam or Sally's start position is on Crazy Floors.
- **6. Build Crazy Floors Model D7 and make it turn.** Follow Building Instructions D, page 56, step 1.

Gently grip one of the floor elements to stop it from turning, and you will feel the pulley belt slip.

- 7. Test Crazy Floors Model D7.
 - Which side of Crazy Floors will move the fastest, Sam's side or Sally's side?

Mark your answers: F = fast and S = slow

Remember to try at least three times for a fair test. It is important to keep an eye on a) where your handle start position is and

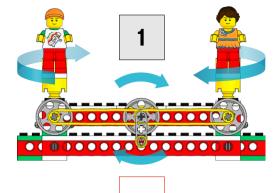
- b) where Sam or Sally's start position is on Crazy Floors.
- 8. Finally, draw a conclusion and check your prediction.

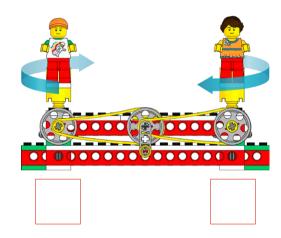
My tests show that Crazy Floors (D6 / D7) showed the larger difference in turning (speed of rotation) between Sam's side and Sally's side.

My prediction was (right / wrong).











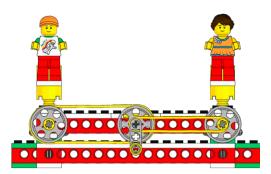


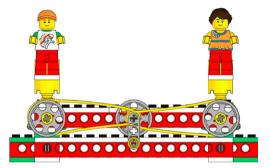




Explore the effects of the different pulley arrangements illustrated. Build them into Crazy Floors one after the other.

What do you notice? Explain how the pulley arrangements are different. Record your observations.





Draw some everyday machines and mechanisms where pulleys are used.

