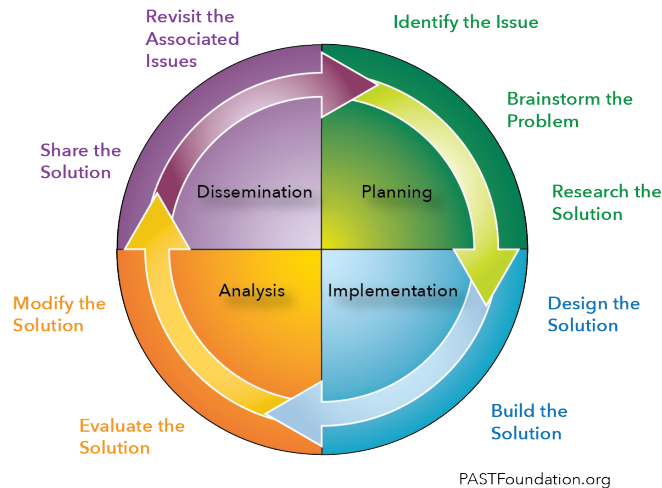


Reindeer Races



Problem Scenario: Reindeer love to play reindeer games, and they want you to join in this year! Since the reindeer have to rest up and get ready for the holiday this year they are doing paper reindeer races.

Challenge: Create a paper reindeer that will race down a ramp the fastest.

Materials:

Paper (different types)	Scissors	Ruler
Optional: Printer	Materials to create a ramp	

Brainstorm: Work together to answer the following questions:

1. What does a reindeer look like? What will help it move down the ramp?
2. How can we fold and/or cut paper to make it go down a ramp?
3. Is the angle of the ramp important for your paper reindeer to be able to move down?

Design/Build:

1. Start your build by creating or cutting out your reindeer. You can print and cut out the reindeer in the build section below, or you can measure and create your own using the measurements provided.
2. Cut along the perimeter dotted line of the large rectangle. Then cut along the other dotted lines. This will create the legs, head, tail and body.
3. Fold the legs down along the solid line, and fold the head and tail up along the solid line. See photo in the build section for reference.
4. Decorate and give your reindeer a name!

Test:

Build a ramp for your reindeer. This can be made with books, wood, or anything else at home!

Place reindeer on the top of the ramp and let go!

If your reindeer doesn't walk or falls when trying to walk here are some tips:

- Change then angle of your ramp. If your reindeer falls which way does the ramp need adjusted? If you reindeer isn't walking which way should the ramp be moved?
- Try different tail and head shapes! You can roll and fold the tail and head of your reindeer to get it to walk.

Is your reindeer walking? Why is your reindeer walking?

Which reindeer won the race?

Modify: Here are a few modifications you can make!

Fold the reindeers tail and head at different angles.

Use different types of paper to build the reindeer. Does one type work better than another?

Cut the bottom of the legs at different angles!

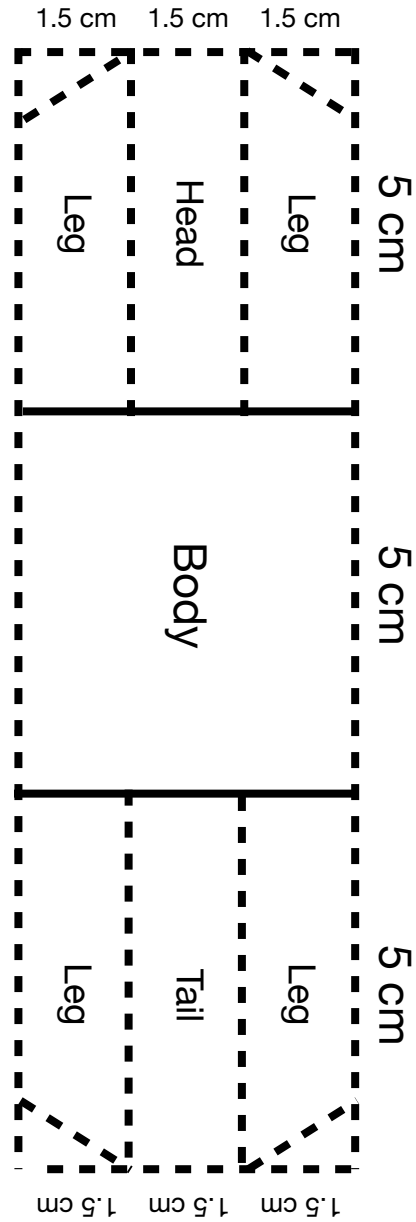
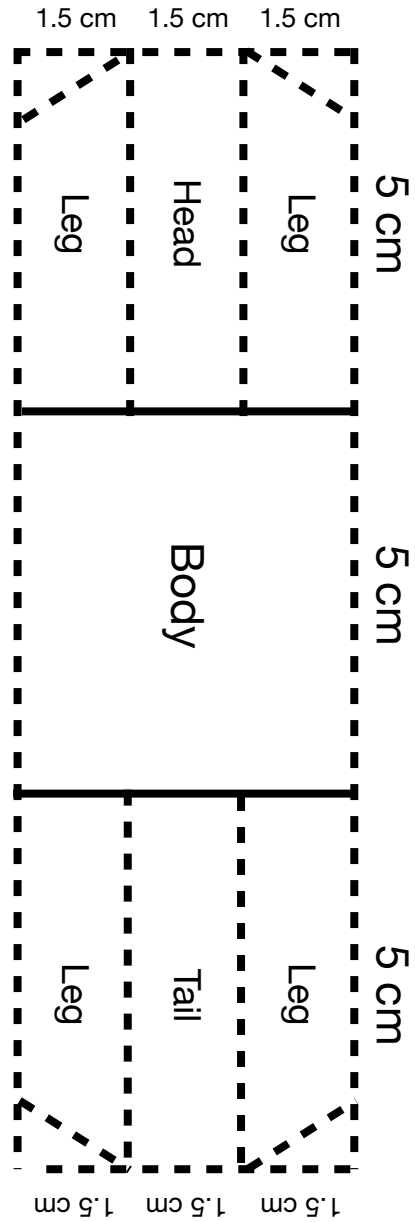
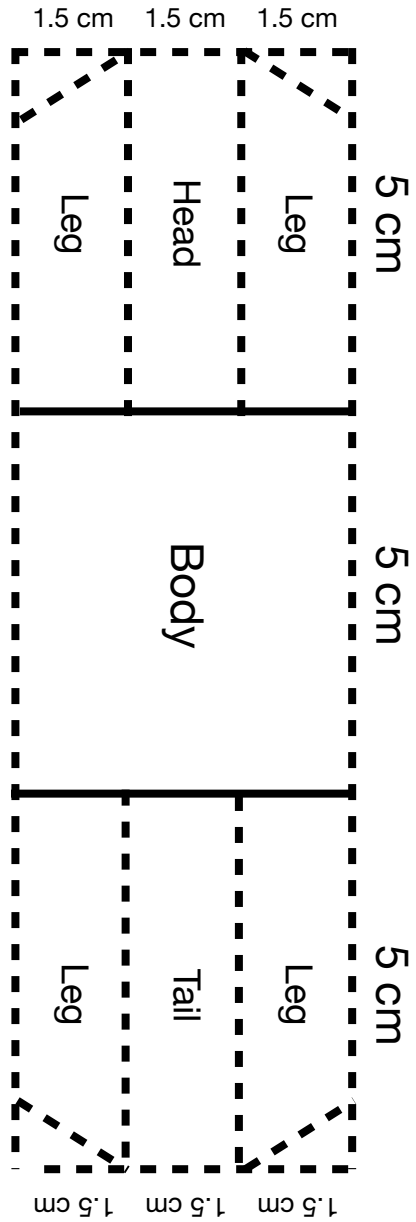
Share:

Share your experiment on Social Media!

Tag us on Facebook, Twitter or Instagram @pastfoundation

Use the hashtag #ThisIsPAST or #DesignThinking

Build:



Reference Photo:



This activity was inspired by: <https://frugalfun4boys.com/paper-horse-that-walks/>