

# Amaze Your Brain *at Home!*

**EXPERIMENTS**

**ALL  
AGES**

## **AMAZING DOGS CHALLENGE**

Dogs are super athletes because their bodies are adapted to find food and to survive threats in extreme environments. Try these experiments with your canine pal at home and see how you stack up with their abilities! **Warning: puppies are not very good at social distancing!**



**CHALLENGE 1: TREAT JUMP**

**CHALLENGE 2: AMAZING NOSE CHALLENGE**

**CHALLENGE 3: SNOUT - EYE COORDINATION**

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## AMAZING DOGS CHALLENGE

(CONT.)

### CHALLENGE 1: TREAT JUMP

#### MATERIALS

- Your dog's favorite treat
- A piece of paper
- Writing tool
- Measuring tape or yard stick
- Chalk



#### INSTRUCTIONS

1. Measure your dog's back leg length from bottom of paw to top of hip, the length of your dog from the front shoulder to the end of the body, right before the tail starts and the tail from the tip of the tail to the spot where it joins the backbone.

Write all these numbers down so you can compare how different types of dogs compare to each other.

2. Find a place either inside or out where it is safe for your dog to be active and jump and near something you can measure against, like a wall or tree trunk. You will mark the jump height with the chalk or have a helper hold a yard stick in the photo.
3. Hold a treat as high as you can and ask your dog to reach for it. You might need to start close to your dog's nose and then gradually raise your hand in the air. Once your dog jumps, give it the treat and measure the height.
4. Repeat 3-10 times and average your results. You might be surprised to see how high your dog will jump for a treat!

**Now you try it!** Measure your leg length from your hip to the ground. Jump high! How high did you jump? Who jumped the highest? Is there a relationship between leg length and height of jump?

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### AMAZING DOGS CHALLENGE

(CONT.)

#### CHALLENGE 2: AMAZING NOSE CHALLENGE

##### MATERIALS

- Your dog's favorite treat
- A piece of paper
- Writing tool
- Timer
- 3 opaque containers/boxes



##### INSTRUCTIONS

1. Keeping your dog out of the room, set up 3 opaque containers on the floor in a line, and hide a favorite treat under one of them.
2. Bring your dog back in to the room and hold your pet 5-10 feet away from the containers (measure this distance and use the same distance every time).
3. Release your dog and start the timer at the same time. Stop the timer when the dog finds the treat.
4. Repeat this experiment three times and average their time.

**Now you try it!** Place a bit of smelly food like cheese, garlic, or oily tuna inside an opaque container with a lid like Styrofoam or colored Tupperware. Can you smell it with the lid closed?

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## AMAZING DOGS CHALLENGE

(CONT.)

### CHALLENGE 3: SNOUT - EYE COORDINATION

#### MATERIALS

- Your dog's favorite toy (anything that your dog can catch)
- A piece of paper
- Writing tool
- Timer

#### INSTRUCTIONS

1. Find a spot where it is safe for your dog to run and jump.
2. Straight up challenge: stand next to your dog, toss the toy straight up and see how many times your dog catches the toy on the first try. Repeat 3-10 times to calculate the catch percentage.
3. Long Toss: Stand next to your dog, toss the toy away from you and use the timer to see how long it takes for your dog to catch up with the tossed toy and catch it. Repeat 3 times and average the time.

**Now you try it!** Have a companion standing next to you toss a ball straight up in the air and record your reaction time while you catch it. Then ask them to throw a ball away from you and see if you can run after it and catch it!



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