The Dog Speed Test

All dog breeds have physical characteristics that make them successful runners. They have grippy paw pads and toenails that give them traction. Their flexible spines and asymmetrical gait also contribute to speed, allowing the dog’s body to stretch and extend as well as compress and push forward. Most dogs can reach sprinting speeds between 15-20 miles per hour (mph). Of course, the size, body shape, and health of a dog will influence how fast it can run.

The fastest dogs have long powerful legs, lean body mass, and narrow heads. They also have strong heart muscles and large lung capacity to help their bodies work harder while running. In contrast, slower dogs have shorter legs (like dachshunds), larger body mass (like Newfoundlands), or trouble breathing (like bulldogs).

Greyhounds are considered the fastest dog breed, clocking in around 40-45 mph. Compare that to the fastest human speed ever recorded was about 28 mph, a record set by Usain Bolt. Here are the average speeds for common dog breeds:

<table>
<thead>
<tr>
<th>Dog Breed</th>
<th>Average Speed (miles per hour)</th>
<th>Average time required to run 30 feet</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greyhound</td>
<td>45 mph</td>
<td>0.454 seconds</td>
</tr>
<tr>
<td>Vizsla</td>
<td>40 mph</td>
<td>0.511 seconds</td>
</tr>
<tr>
<td>German shepherd</td>
<td>30 mph</td>
<td>0.682 seconds</td>
</tr>
<tr>
<td>Boxer</td>
<td>30 mph</td>
<td>0.682 seconds</td>
</tr>
<tr>
<td>Jack Russell terrier</td>
<td>25 mph</td>
<td>0.818 seconds</td>
</tr>
<tr>
<td>Toy poodle</td>
<td>10 mph</td>
<td>2.045 seconds</td>
</tr>
<tr>
<td>Basset Hound</td>
<td>5 mph</td>
<td>4.090 seconds</td>
</tr>
</tbody>
</table>

Materials needed:
- Tape measure
- Tape
- Stop watch or timer
- Paper
- Pencil

Step-by-step instructions:
1. Find an open area and measure a distance of 30 feet.
2. Mark a start and finish line with tape.
3. Record how long it takes you to run 30 feet and write it down.
4. Repeat step 3 two more times.
5. Calculate the average amount of time it takes you to run 30 feet (the sum of all your times divided by three).
6. Compare your average speed to the fastest and slowest dog breeds.
The Dog Speed Test (continued)

Additional explorations:
• Do you have a dog at home? Record how fast they can run 30 feet! How does their time compare to your time?

Discussion questions:
• What physical characteristics make some dogs faster than others?
• How does your average speed compare to common dog breeds?
• Is there a difference between speed and endurance? What dog breeds do you think can run for the longest amount of time?

Additional resources:
Compare the speed of a greyhound and a cheetah in slow motion:
https://www.youtube.com/watch?v=jc8Hno4M0Qs