

## SHEET ONE - SPEEDING ACROSS THE LAND

People and animals have had to travel over land since the beginning of time. Being able to travel faster and further gives both people and animals advantages.

Animals that hunt other animals need speed to run down prey for food and travel allows us to transport food and supplies to support life as well as keeping us connected with family and friends.

Unfortunately, we are not physically the best at land travel. The table shows that we are not the fastest animals on earth. Our rank is not very impressive with the cheetah able to travel 70 kilometres per hour (kph) faster than the average human.

So, humans are not very fast until we factor in technology.

***Throughout history people have used technology to overcome limits on their physical abilities.*** We do not need to run faster and further because we have created vehicles and transportation systems to move people and cargo beyond our physical abilities and those of every species on earth.

How fast have humans travelled on land? In, 1997, a British team of engineers built the Thrust SSC (Supersonic Car) land speed vehicle and drove it to a speed of 1234 kph. This is faster than the speed of sound and 1121 kph faster than a cheetah!

Vehicles designed to break the land speed record are not your typical cars. This vehicle is shaped like a fighter jet and was powered by two turbojet engines.

We don't see jet powered cars on the road. Internal combustion engines power cars and trucks. Top fuel dragsters, the top land speed vehicles with internal combustion engines, have reached speeds of 540 kph in ¼ mile. Going from 0 mph to 540 kph in such a short distance would surely be an exciting ride.

| Animal                | Speed |
|-----------------------|-------|
|                       | (kph) |
| Cheetah               | 113   |
| Antelope              | 98    |
| Lion                  | 80    |
| Horse                 | 76    |
| Fox                   | 68    |
| Dog (Greyhound)       | 63    |
| Deer (White-Tailed)   | 48    |
| Bear (Grizzly)        | 48    |
| Cat (domestic)        | 48    |
| Human (Olympic Class) | 45    |
| Elephant              | 40    |
| Human (average)       | 24    |
| Squirrel              | 19    |
| Pig (domestic)        | 18    |
| Chicken               | 14    |

