

Road Safety Theme: Speed and Stopping Distances	Year-group: Years 5 and 6
<p>Aims: To increase awareness of vehicle speed and stopping distances and enable pedestrians to cross roads more safely.</p> <p>Objectives: To explore speed, especially looking at speed in relation to pedestrian safety – introduce the concept of speed limits. To show that the faster an object is travelling, the longer the distance it will need to stop. Bring in the concept of reaction / thinking time and braking time in relation to vehicle stopping distances. Relate this to a pedestrian’s assessment of the risks when crossing the road. Summarise with key safety statements.</p>	<p>Curriculum Links: PSHE/Developing a healthy, safer lifestyle. Mathematics/Handling data/Processing, representing and interpreting data. Citizenship/Developing confidence.</p> <p>Resources: Computer and screen (with sound) to run Powerpoint presentation. <u>Or</u> The Speed and Stopping project pack. ‘Reaction’ cards. String, 12 metres for 20mph, 23 metres for 30mph.</p> <p>Lesson duration: 40 minutes total</p>
<p>Introduction: (5 mins) Explain that we are going to be talking about speed and that we measure speed in mph (explain). Do the ‘What Speed?’ quiz with the class, getting them to guess the normal travelling speed for: - a person walking – 3mph; a cyclist – 20mph; a moped – 30mph; a cheetah –70mph; a car – 70mph; a passenger jet – 600mph (explain 70mph speed limit on our roads for the car).</p>	
<p>Main Focus: (POWERPOINT PRESENTATION OR PROJECT PACK TO ACCOMPANY THIS SESSION)(30MINS) As pedestrians we need to be aware of two facts about vehicles and speed: 1) The faster a vehicle is going the harder it will hit you if you are involved in a collision with it. 2) The faster a vehicle is going the more time it will take to stop. We call the distance a vehicle travels from the time the driver decides to stop until it comes to a halt its ‘stopping distance’. In an emergency – say if a child runs out in front of a car what sequence of events has to happen before the car stops? All of this takes time, the car doesn’t stop instantly! Explain ‘Thinking’ & ‘Braking Distances’. Thinking distance depends on how fast the driver reacts to the situation (try <u>reaction cards</u>). The slower the reaction the further the car travels! The driver still needs to apply the brakes and the brakes need time to work before the vehicle will actually stop. Discuss what might increase the thinking distance and the stopping distance – weather, condition of the car, condition of the driver, driver distractions. Get 6 children to guess where a car would stop at <u>20mph</u> - measure out the distance with string (marked in car lengths), a total of 12 metres or 3 car lengths. At <u>30 mph</u> it’s 23 metres or 6 car lengths. Show chart of stopping distances.</p>	
<p>Plenary: (5 mins) When we are walking by the roads or riding our bikes we need to be aware of the effect of speed on vehicles. Understand that vehicles (including bicycles) can’t stop instantly – the driver needs time to react and the car needs time to stop. We need to be aware of the speed things are moving around us so we don’t take unnecessary risks – don’t run out or cross if there are cars coming – if something happens the car probably won’t be able to stop in time. Even at Zebra and light-controlled crossings be extra careful – don’t start to cross until the cars have STOPPED. So be careful and keep safe!</p>	
<p>Evaluation: The session usually takes about 40 minutes, which gives enough time for interaction and discussion. Follow-up worksheets on Hazards and Risks are available. Try the THINK! Education sites for teaching ideas, worksheets and other resources</p>	