

Science of the Body

26 Jan 17:00

Duty six : Purple

Start	Time	Activity	Requirements	Instructions	Scouter
Our theme is science this term. We are going to find out more about the human body today					
26 Jan 17:00	5	Activities : Opening	Register, beans, flag, totem and skin	Grand Howl Flag Break Register Inspection - belts and shoes	Akela
Everyone is on in this next game - how quickly can you run?					
26 Jan 17:05	0	Game : Band-Aid Tag		There is no "it" in this tag game! All Cubs can tag and be tagged. When a Cub is tagged, they put a hand on the spot where they were tagged—that's the "Band-Aid." Then, they can keep playing, using their free hand to tag others. If they get tagged again, they'll need to use their other hand as a second Band-Aid, but they can still keep playing! A third tag sends them to the "hospital" (a designated spot near the playing area). Once there, they can perform a predetermined action, such as hopping on one foot for a count of 10, to heal their wounds and then return to the game.	Akela
We are starting our Cub National Challenge which focuses on healthy mind and healthy body. Let's start with some yoga which can help with both.					
26 Jan 17:05	20	Activities : Yoga	Yoga mats/towels	Noxy to lead the Cubs through a short yoga session	Akela
When we have injuries, our body bleeds to help clean the wound. But what should we do next?					
26 Jan 17:25	10	Activities : First Aid Silver Wolf	First Aid kit (not necessary but to show them where it is kept and what is in it that can be used in an emergency)	First Aid 1. Know the importance of summoning adult help in the case of accidents. 2. Show how to treat a simple cut and graze . 3. Show how to treat a bleeding nose . Can use a fake wound for the cut/graze to make the activity more realistic. Include burns if wanted as this is a common hazard at camps and in the kitchen that is not covered.	Akela
The skeleton helps our body have structure and helps us stand, balance. What happens though if you break a bone?					
26 Jan 17:35	10	Activities : Uses of a Bandana	Bandannas per Cub	Use your bandana to act out a different way to use it - just for fun or for survival. There are st least 60 ideas	Akela
Hydration of the body is also important. We need to eat and drink to stay healthy					
26 Jan 17:45	5	Activities : Juice and biscuits		Juice and biscuit break	Akela

Cubs, like Scouts, also like to be prepared. Let's make our own emergency kit that you can take with you.					
26 Jan 17:50	15	Activities : First Aid Kit	Some plasters or dressing strips – to cover blisters, cuts and grazes. Notepaper and a pencil – for jotting down a message or some information. Some safety pins – these have many uses. A plastic bag — which can be used as an emergency drinking Cup, or to carry water, or for helping an injured person who is bleeding. A pair of tweezers with blunt ends – to remove thorns and splinters. Alcohol swab Gloves Plaster or two Small piece of card with emergency numbers Needle and thread (optional) Container Red tape	Silver Wolf - First Aid: Make a simple emergency kit and know how to use it When discussing this requirement with your Cubs, make sure that you have a couple of examples to show them. Remember that this emergency kit should be small and compact enough to fit into the uniform pocket. It may be in a small tin, plastic container or just a plastic bag, but it must be waterproof. The items can be changed according to what you think is most useful. They need to know how to use each of the items in their kit.	Akela
Our bodies can do amazing things but they also have limits. Here are some challenges for you to try.					
26 Jan 18:05	20	Activities : Balance Challenge	Chairs Smarties	<p>You maintain your balance by keeping your centre of gravity over your support base (your feet). If there is a major change in this equilibrium, you fall over. In routine day-to-day activities, your body maintains balance with little adjustments that are so automatic that you don't notice them. In the following series of activities, students reflect on these adjustments that make balancing their bodies possible.</p> <p>When you're standing straight, your centre of gravity is somewhere around your belly button. When you change your body's shape, you shift the centre of gravity a bit. For example, when you stick a leg out in front of you, your centre of gravity shifts forward. To keep your centre of gravity over your other foot, you lean your upper body or arms in the opposite direction to the leg.</p> <p>At the elementary school age, most students have a centre of gravity below their belly button. As they grow, the centre of gravity shifts as their bodies change, depending on their sex. Older boys tend to have bigger, heavier shoulders and a higher centre of gravity. Older girls will keep a lower centre of gravity, which is naturally located in the pelvis.</p> <p>General Procedure:</p> <p>Invite a different volunteer to come to the front of the class to demonstrate each part. After each demonstration, invite the students to try it for themselves.</p> <p>Part 1: The Impossible Leap</p>	Akela

- While standing, bend over and hold your toes with your hands, keeping your knees slightly bent.
- Jump forward in this position while holding your toes
- Try jumping backwards.

While bent over and holding on to your toes, you can jump backwards from one end of the room to the other, but you won't be able to do a single jump forward. When we jump, we first shift our centre of gravity in the direction we want to jump, and then we move our support base (i.e. our feet) in the same direction to regain our balance. When you are holding onto your toes, jumping backwards is not a problem because you can use your heels to shift your weight. But to jump forward, you would have to use your toes. Unfortunately, your fingers are in the way.

Part 2: The Super Glue Chair

Sit in a straight-back armless chair, keeping your back against the back of the chair and your feet flat on the floor.

Fold your arms across your chest.

Keeping your feet flat and your back straight, stand up.

While sitting in a chair with your back against the chair and your feet on the floor, your centre of gravity is at your waist, supported by the chair. When you try to stand up with your back straight, you prevent the centre of gravity from moving to a position above your feet (your support base), as you would need to, to stand up. So you remain glued to your chair!

Part 3: Pick-Up Trick

Place an object on the floor about 50 cm from a wall. Paper money works well. Tell the students they can keep the \$10 bill if they succeed at this challenge (Hint: they cannot).

Stand with your back against the wall, feet together and heels against the wall.

Try to pick up the object on the floor without moving your feet or bending your knees.

When you stand straight against the wall, your centre of gravity is over your feet. When you bend forward, your centre of gravity shifts forward. In order to keep your balance, you must move your feet forward or your bum backwards. This would ensure that your centre of gravity is right above your feet to maintain stability. Since the rules of this challenge do not allow you to move your feet and the wall is behind you, there is no way to shift your centre of gravity to maintain balance while trying to pick up the money. If you insist on picking up the object, you will fall flat on your face.

Part 4: Leg Lift

Stand against a wall with your right side facing the wall, then put

your right foot and cheek against the wall (you may need to move your right arm backwards).

Lift your left foot off the floor.

In order to move your left leg while your right side is against a wall, you need to shift your centre of gravity over your right foot. You cannot do this without moving the wall.

Part 5: Smartie Sniffer

Pair up the students and give them each a Smartie.

Partner 1: Kneel on the floor with your knees together. Crouch down with your arms in front of your knees, elbows snug against your kneecaps.

Partner 2: Place the Smartie at the tip of your partner's outstretched fingers.

Partner 1: Once the Smartie is in place, straighten up so that you are kneeling upright. With your arms behind your back, lean forward to touch your nose to the Smartie.

Swap roles with your partner.

This exercise can be used to determine the approximate location of your centre of gravity. If you could not touch the Smartie (candy) without falling over, your centre of gravity is high (above your belly button). When your centre of gravity is high, it will surpass your base (between the knees and toes) when you lean over. If you succeeded in touching the Smartie, it means that you have a low centre of gravity. Even when you lean over, your centre of gravity is still above your base.

You can also try some others:

Step over broom

You grab a sweeping brush and hold it sideways with two hands.

Bend over towards the floor so the brush is almost touching the ground.

Step over the brush one foot at a time.

Surprisingly most women can complete the manoeuvre relatively easily, but most men cannot.

Chair lift

Step two feet away from the wall.

Bend over so that your head is pressed against the wall at a 45 degree angle.

Lift the chair up to your chest.

Stand back up without removing the chair from your chest.

Again most women can complete the move, but men cannot.

				<p>One suggested reason why men can't finish this move is that their centre of gravity stops them from standing up.</p> <p>Face to the floor</p> <p>Get on your knees.</p> <p>Lean forward, rest your elbows on the floor, and rest your head in your hands.</p> <p>Take your elbows away, putting your hands behind your back without smacking your face on the floor.</p> <p>Many men struggle to complete this move. However, a rare few have managed.</p> <p>Squat to the floor</p> <p>Stand with your toes touching the wall.</p> <p>Slowly squat all the way down until your bottom is on the floor.</p> <p>Lay flat on the floor.</p> <p>Get back up the exact same way.</p>	
I hope you look after mind, emotions and body over the next week when we will be exploring electricity.					
26 Jan 18:25	5	Activities : Closing	<p>Totem, Skin</p> <p>Badges, certificates</p>	<p>Announcements</p> <p>Badge handouts</p> <p>Grand Howl</p> <p>Flag Down</p> <p>Prayer</p> <p>Dismiss</p>	Akela