Outdoor adventures
Take proper precautions

Strap in for a safe ride
Select the right car seat

Bugs bite
Avoid the pain
Deem, age 7
Sara, age 3
on the cover
Panorama is proud to feature Saudi Aramco employees and their families.
Don’t let the bugs bite

"Heavy breathing or larger lung capacity has been shown to attract insects."

Enjoying the outdoors is great, until the bugs begin to bite. Mosquitoes can turn a great day in the park into an itchy afternoon. Their bites can carry disease, and a simple itch can lead to sores and scarring. They can transmit malaria, yellow fever, the Zika virus, and other diseases that kill millions of people each year.

Easy targets
Some people are frequent targets for bites, while others don’t get a single nibble. There are many factors that can make you a tempting target including genetics, which may account for up to 85% of the variation in attractiveness.

Smell is another factor. Mosquitoes can detect carbon dioxide, emitted when you breathe, from up to 50 m (164 ft) away. Heavy breathing or larger lung capacity has been shown to attract insects, and is one reason why children generally get bitten less often than adults.

Mosquitoes can also smell acids and other chemicals released in sweat, and are attracted to people with higher body temperatures. Strenuous exercise increases all of these factors, and pregnant women become prime targets, since they exhale about 21% more carbon dioxide than usual and have a warmer than average body temperature.
Blood type also appears to be a factor that helps a mosquito choose its snack. In a controlled setting, mosquitoes landed on people with type O blood group nearly twice as often as those with type A.

Some research suggests that mosquitoes also use visual cues and can be attracted to particular colors and movement, especially in the late afternoon and after dark. Colors such as black, dark blue, and red stand out, whereas wearing neutral colors and avoiding being outdoors during the late afternoon and early evening can help reduce your chances of being bitten.

**Prevention**

The good news is that eating bananas does not, as some people believe, make you more attractive to mosquitoes. The bad news is that if you are a “mosquito magnet,” there isn’t much you can do to change that except use insect repellent and stay indoors.

You can take steps to reduce your chances of bug contact by avoiding areas where mosquitoes lay their eggs. These eggs hatch in standing water, so empty all buckets, bird baths, old tires, and other areas where standing water could allow them to breed.

Covering up is another good method to protect your skin, but wear loose fitting shirts and pants as mosquitoes can sometimes pierce thin fabrics close to the skin. If possible, sit in an area with good air circulation such as in front of a fan or air conditioner, and keep screens on doors and windows shut. If there are likely to be mosquitoes in your room at night, sleep under a mosquito net, and spray the area of the bed with insecticide an hour before climbing in so you don’t trap the bugs inside with you.

There are three main insect repellent chemicals used commercially: DEET, picaridin, and oil of lemon eucalyptus. The U.S. Environmental Protection Agency (EPA) says each of these is safe and effective, if used correctly. DEET products, with concentrations of 15 to 30%, provide the most reliable and longest-lasting protection.

There have been health concerns about DEET products, but if applied correctly these are limited, and both the EPA and the U.S. Centers for Disease Control and Prevention (CDC) say the risks appear to be very low. The biggest problem is when people apply too much, or fail to follow the application instructions.

Picaridin is a synthetic chemical that resembles a compound found in pepper, and hasn’t been as fully tested as DEET products. It can irritate eyes and skin, just like pepper. Oil of lemon eucalyptus is a synthetic version of a chemical in the lemon eucalyptus plant and is rated safe for children aged three years and above.

Other options for repelling insects include using lemongrass oil, citronella oil, and peppermint oil. Unfortunately, these only provide a few hours of protection as the oil evaporates, and for people who are “magnets,” they may not work at all. Citronella candles and incense can be effective in creating a mosquito-free zone without requiring direct application.

The American Academy of Pediatrics advises against using any insect repellent on infants younger than two months. Instead, cover the stroller in netting when outdoors. Adults should apply repellent to kids by spraying it on their own hands, and then rubbing it onto the child’s skin. Avoid putting it around the mouth or nose, and on any cuts or irritated skin. Only apply repellent to exposed skin or the outside of clothing, and wash your hands after applying. Spray in an open area to avoid inhalation, and be aware that lotions and wipes are not as effective as sprays. Don’t leave bottles of insect repellent around children, as they are harmful if swallowed.

Taking steps to protect yourself from mosquitoes is simple and always a good idea.
When you’re stuck behind a slow moving vehicle and in a hurry to get to an appointment, it’s easy to get impatient. If that slow vehicle in front of you is a bicycle, the frustration may grow. They seem to be slow and unpredictable, and they take up more space than their small size deserves. Nevertheless, all vehicles are allowed to use the road, so cars and bicycles must learn to share.

Cyclists are not a common sight on the road in desert climates. However, the use of bicycles is becoming increasingly popular as a hobby and for commuting in many countries. This means drivers must be aware of how to react around cyclists.

Using the horn and expecting them to move out of the way is not a solution. When driving a car, you must remember that roads are not there for your exclusive use. Rules of the road apply to everyone on the road. Treat cyclists just the same as any other vehicle. In turn, cyclists are expected to obey the rules of the road. But cyclists are a lot more vulnerable because of their size and speed.

Take extra care around bicycles. You must look around and use your turn signals to make your intentions clear. Cyclists are also responsible for making themselves visible and signaling their intentions with hand signs.

One of the most common cycling practices that is misunderstood by drivers is why cyclist don’t ride as close as possible to the sidewalk. It is often safer for cyclists to leave some space between themselves and the sidewalk. A piece of glass, loose stones, or a pothole are hazards that cyclists must face but do not affect cars. Leave at least one meter between your car and a cyclist when passing.

Use your head
Serious head injuries are the most common cause of cyclist deaths. Cycling fatalities make up 2% of all traffic deaths in the U.S., and cyclists killed on the road are four times more likely to not be wearing a helmet. A helmet will protect your head in the event of an accident. Nevertheless, helmets are only part of the solution and you must always practice safe riding skills when on a bike.
**Robotic delivery** – With a surge in demand for home delivery services and contact-free transactions, a company named OTSAW Digital is trialing two grocery delivery robots in Singapore. The robots, both named “Camello,” are in a one-year trial among 700 households. They are equipped with 3D sensors, a camera, and two compartments able to carry up to 20 kg (44 lb) of food each, and use ultraviolet light to disinfect themselves after every trip.

**Pet watch** – Using home-based cameras to check on pets is not a new concept, but ongoing refinements to cameras and connected apps are bringing increasing benefits for pets and owners. Improved two-way audio connections allow owners to talk to pets, virtual assistants can play music or soothing sounds, and app-connected treat dispensers are some of the latest enhancements in pet-friendly homes. Owners even have an option to connect via app with a veterinarian.
Clean and contactless

For some people shopping is as much about the adventure of discovering new things as it is about ensuring the cupboards are full. This in-person experience has been made safer thanks to the increase in popularity of contactless payment methods.

Cash as a means of exchange is declining as shoppers shift towards using mobile phone apps and contactless card payments to replace paper and coins. The main concern with using traditional payment methods is that they could potentially be an infection pathway for disease. However, the relatively sudden rise of contactless payments has also led to fears that consumer protection has been compromised, and that it may be easier for hackers or contactless pickpockets to snatch card details and empty bank accounts.

There are real safety concerns related to these methods of payment, but as with other technological innovations, apprehension, misinformation, and false reports can often lead to unfounded fears about scams, fraud, and other forms of electronic theft.

Contactless payments exist in a number of different forms. The most widely used is a contactless card where a digitally enabled card is waved over a point-of-sale (POS) machine. An upper limit is set for these payments and if the amount is greater than this limit, a PIN is required to verify the transaction. Mobile payment systems use a mobile device, such as a tablet, mobile phone, or smart watch, instead of a payment card.

Payments can also be made using QR codes, which involve using a mobile phone to scan a QR code set up by a merchant for a specific product. All of these methods require use of a PIN beyond a set value, or if the card is used frequently within a short period of time.

Concerns about the security of these payment methods have been fed by stories of “contactless pickpocketing” where people in crowded environments, such as buses and train carriages, had payments taken from their card by someone nearby with a mobile card reader. Despite such fears, these methods are secure and contactless pickpocketing is “impossible,” according
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The ease of paying with a contactless method makes it increasingly common, even for transactions of small amounts. In addition to being easy, this technology has allowed the introduction of contactless payments that are robust and secure, as long as cards and phones are kept secure.

The real danger is in losing a card or mobile phone. Make sure to report any loss as soon as possible so that the card or phone can be blocked, and turn off auto-pay systems such as Apple Pay. Because a PIN is not needed for a transaction, a lost or stolen card or device could give someone easy access to your account. The best defense is to make sure phones and smartwatches have the proper security features in place, such as having it lock after a period of disuse, keeping the software up to date, and only accepting downloads and apps from reputable sources.
Strap in for a safe ride

Car seats and boosters provide much needed protection for infants and children. According to the U.S. National Highway Traffic Safety Administration, using a child seat can reduce the chances of an infant or child’s death in a collision by 71%, and the chance of death in children between the ages of one and four by 54%. Yet despite widespread promotion for child car seat use, car accidents are still a leading cause of harm for children around the world.

To ensure the safety of children, it is important to always use a car seat and install it correctly.
When researching the correct seat for your child, choose one that meets, or exceeds, local traffic safety standards and guidelines. Consider your child’s size, weight, and age, and get a seat that is appropriate to fit these requirements. Newborn babies start out in an infant-only (rear-facing), or convertible seat. As they grow, they should be switched to forward-facing seats before moving to a booster seat.

Take time to learn how to install the seat correctly, and test the harness before each use. Never use a seat that has missing parts, has cracks or other signs of wear and tear, or does not have a manufacture date and model number. Be sure to check the seat for its recommended expiry date, and if you plan to purchase a secondhand car seat, find out if it was involved in any accidents as it may be damaged, even if damage is not visible. Also check for any manufacturer recalls before purchase.

**Seats**

A rear-facing seat is ideal for a newborn baby or infant. When a baby is strapped in, this design is able to move with a child in a collision to reduce stress to a fragile neck and spine. These should be used for kids from birth up to 9 kg (20 lbs). There are many types of rear-facing seats, including the rear-facing only model. This infant-only seat is small and portable. Because babies grow quickly, a convertible seat is also a popular choice as it can be changed from rear-facing to forward-facing with a harness and tether, as is the all-in-one design, which can be changed from rear to forward-facing, and then to a booster seat as a child grows.

One major difference of a forward-facing car seat, is that it has a harness and tether that limits a child’s forward movement. This enhances the safety of an older child substantially in the event of a collision. Depending on the model, this kind of seat is designed to protect children up to 18 kg (40 lbs).

**Boosters**

The American Academy of Pediatrics recommends that children use a car seat until they reach the maximum height or weight for the five-point harness built into the seat, which is usually not until at least age four. After that they should transition to a booster seat.

There are two main types of booster seats: the high back and backless. A high back booster seat is designed to increase the child’s height so that the seat belt fits properly. It also provides additional neck and head support, while the backless seat should only be used in vehicles that have head rests.

Car seats and boosters are designed to protect young children when traveling in vehicles, and using one of these correctly clearly improves their overall protection. Ensuring it is the right type and fit for the child, and has been reliably manufactured, are all factors to bear in mind when selecting the best option for a child.
Making the case for cast iron

Cast iron cookware comes in different shapes and sizes, and is prized for its durability and heat retention. It is sometimes passed down from one generation to the next, and is appreciated by chefs and home cooks alike.

Cast iron pots and pans are one of the few pieces of cookware that, if maintained well, improve with every use. They are extremely versatile and can be used for cooking both on the stove top and in the oven. They are also nearly impossible to destroy, and can be restored if damaged.

Cooking using cast iron equipment also has health benefits. A study published by the Journal of the Academy of Nutrition and Dietetics found that significant amounts of dietary iron leaches into food when cooked in cast iron cookware, which can reduce iron deficiency. The more acidic the food, the more iron is absorbed. However, highly acidic foods, such as vinegar and tomato sauces, can corrode the pan over time, giving food a metallic taste and potentially damaging the cookware.

Seasoning

Cast iron stands apart from other cookware as it needs to be seasoned, a process of repeatedly layering extremely thin coats of unsaturated oil onto the surface and baking it at high heat to produce a corrosion and stick-resistant coating.

Cooking regularly with cast iron adds to the seasoning and enhances the cookware. A seasoned cast iron skillet looks shiny and smooth as opposed to matte and grey. Most modern cast iron cookware comes pre-seasoned, but will still need re-seasoning from time to time to prevent rust.
If your cookware starts to look dull or food starts sticking to the surface, it’s time to re-season. Apply a thin coating of cooking oil with a high smoke point, such as vegetable or sunflower oil, to cover the entire pan including the handles and bottom, place it upside down in the middle rack of an oven preheated to 190° C (375° F), and bake it for an hour. Allow it to cool before handling.

**Cleaning**

Carefully clean cast iron cookware to maintain seasoning and avoid rust, which can occur from soaking or putting it in the dishwasher. Use warm water with coarse salt or baking soda to scrub off food stuck to the pan, but use soap sparingly and only when needed to remove tough and gritty items. Use a sponge or stiff brush for scrubbing, but avoid steel wool unless removing rust. If the cookware is new, wash it with warm soapy water after the first two or three uses, before reverting to warm salt water.

Make sure to dry your cookware thoroughly after washing, before coating it with a thin layer of oil, preferably immediately after washing. Never submerge hot cast iron into cold water, as this could result in cracking or shattering.

**Maintenance**

Cast iron has a reputation for being difficult to care for as it needs hand washing and takes additional maintenance versus other cookware. The small amount of extra time necessary for cleaning is minimal compared to its reliability and longevity.

Cast iron cookware is versatile and ideal for high temperature cooking, searing, grilling, and baking. Take proper care of your cast iron cookware, and it will last you a lifetime.
In 2012, a mother’s worst nightmare came true, when her daughter pulled a dresser and TV on top of herself, suffering fatal injuries. After that she started advocating for companies to supply furniture wall anchors, and people to check their homes, and secure any heavy objects and tall furniture. According to the U.S. Consumer Product Safety Commission the number of furniture-related tip-over injuries in 2019 was recorded at approximately 20,500. To prevent these injuries, all cabinets, dressers, bookcases, and any large furniture that could tip over should be anchored to prevent overturning.

**Anchoring furniture**
Any furniture that can tip should be attached to the nearest wall using strong furniture anchors. It is recommended that at least two anchors are used for each piece of furniture, and installed into the wall stud or concrete, not into dry wall, plasterboard, or tiles alone.

Anchors typically include two brackets linked by a strap or cable, one fastened to the wall and one on the piece of furniture linked by a strap or cable. The connected strap or cable is attached to each bracket and tightened in place.

Some furniture sellers provide anchors with new items, but kits could be found online and at furniture retailers. Peter Kerin, founder and owner of Minneapolis-based Foresight Childproofing, recommends the use of kits with straps made from nylon webbing or braided steel cable. They should be checked annually to ensure they are still in good condition and secure to the wall.

**Safe home**
For furniture, use drawer stops to prevent children from opening and climbing them, and avoid overloading drawers with heavy items that could unbalance furniture. Store heavy items on the bottom shelves of bookcases and dressers, and secure other items separately.

Climbing increases the chances of a tip-over and falls can result in broken bones or worse. Teach your children about safe behaviors around furniture, but also take steps to ensure their safety.

**Not just for kids**
Tip overs can be a problem for households that don’t have kids. Pets may climb on shelves, earthquakes or unexpected vibrations can cause shifting, and some furniture is built top heavy and requires brackets as part of their build kit. For example, the IKEA Billy bookcase with full glass doors is front heavy and must be secured before the doors can be added.
Whether hiking, cycling, horse riding, or going for a walk with your dog, outdoor activities are an ideal way to escape the confines of indoor living. Getting some fresh air and exploring natural spaces helps you stay physically fit and is a great way to relieve stress and boredom. Outdoor recreation does, however, bring with it certain risks that need to be managed.

Not all activities are equal. Horse riding or cycling, for example, have different risks to those such as hiking or fishing. While these activities might be different, the long-term benefits of regular exercise and outdoor activity far outweigh the risks, and there are precautions that can be taken when heading out on an adventure off the beaten track.

"Always let someone who is not going with you know where you are headed, and when you expect to return."

Plan ahead

Before you leave home, be prepared. Ensure that you have all necessary equipment and supplies, planned a route, and know the weather forecast.

The most important part of any outdoor activity is staying hydrated. Carry enough water for the time you will be away. A minimum of two liters is recommended, but more may be required depending on time spent, intensity of the activity, and the weather.

Planning your route means knowing where you will start, how long you expect to take, and what you might encounter along the way. Maps are an essential part of this, even if not on paper. You can’t always rely on mobile coverage, so download offline maps to your device before you leave home. All gadgets required for maps, such as GPS or mobile phones, must be fully charged, and take a power bank or solar charger if you’re going on an extended outing. Even if you’re heading to a familiar trail, take a map in case things don’t go as planned.

Always let someone who is not going with you know where you are headed, and when you expect to return. They can raise the alarm if you don’t check in as planned. Location tracking through mobile apps is a great way for friends to know where you are at any time.
Finally, remember to check the weather forecast. Knowing the conditions you may encounter means you can be prepared for them. Pack sunscreen and bug spray, and apply it regularly; bring additional clothing and waterproof layers if rain or cooler weather is in the forecast.

**What to pack**

There are other essentials that should be packed in addition to a map and water. A suitably equipped first aid kit and emergency supplies are a must. These should include a whistle or means of attracting attention such as a mirror or flashlight, as well as some high-energy food.

In addition to a hat, sunscreen, and insect repellent, some activities may require a little extra. Cyclists should carry a basic toolkit and a spare tube in case of breakdown or puncture, and should always wear a helmet when riding.

**On the trail**

While enjoying the beauty of nature and open spaces, it is easy to forget the simple precautions of regularly reapplying sunscreen and taking small sips of water. Set alerts if you think you’ll forget, or appoint a member of the group to remind everyone to do this.

Conditions can change and plans may have to be adapted. Be flexible when it comes to completing your planned route. It is important to know when to stop, when to turn back, and when to call emergency services.
Outdoor adventure packing list

- Water (at least two liters)
- High energy food
- Offline or paper map
- Power bank or solar charger
- First aid kit
- Sunscreen
- Bug repellent
- Hand sanitizer
- Disinfecting wipes
- Extra clothing
- Rain gear
- Sunglasses
- Hat
- Flashlight
- Whistle

Hazards in the open include wild animals and insects, getting lost, injuries or illness including heat stress, or a change in the weather. Know your limits, and if conditions are difficult, it is time to turn back. Don’t hesitate to call it quits if there are concerns about the health of anyone in your party, or if conditions turn out to be worse than anticipated.

An emergency is not always sudden. It can also be gradual, like a minor pain that becomes unbearable, heat stress after an hour or two, getting lost in some sand dunes, or running low on water sooner than expected.

Call emergency services if conditions become more than you can handle. Know how to communicate your location, especially when in unfamiliar territory with no obvious landmarks visible. Stay together with fellow adventurers as splitting up will double the effort required by emergency services to find you. Two or more people are easier to find, and it is better to support each other than to risk aggravating a situation by being alone in a difficult environment.

Outdoor recreation does bring risks which must be understood, prepared for, and managed but they don’t need to prevent you from having fun.
In 1940, while working as a street painter for the City of Los Angeles, Charles D. Scanlon designed the traffic cone, a hollow, conical marker to keep cars from driving over wet paint. He patented the product in 1943, and today’s plastic cone design was piloted in the U.K. in 1961.

Charles Scanlon

While variations of pot holders have existed for centuries, the official oven mitt was invented in the early 1870s by Earl Mitt, a baker from Texas. He was badly burned while baking a cake, resulting in permanent damage to his left hand. He created mitts made of wool and leather which allowed hot tins to be held long enough to safely remove them from the oven. The name of the item is based on its shape and use as a hand covering, while the name of its inventor is an interesting coincidence.

Earl Mitt

The earliest form of commercial sunscreen was created in 1938 by Franz Greiter, a Swiss chemistry student who got sunburned while climbing Mount Piz Buin on the Swiss-Austrian border. As a result, he produced an effective sunscreen called Gletscher Crème (Glacier Cream), and sold it under the brand name Piz Buin. It’s still available today.

Franz Greiter
Parked car care tips

If your vehicle has been parked for a long time, there are a few things you need to do before heading out on the road. These will ensure your car is in good shape and ready to travel.

Prevention
Car batteries discharge over time, so they may require a jump start after a long period of sitting idle. The easiest way to prevent a dead battery is to drive the vehicle on a regular basis. Drive for at least 20 minutes once a week. If you do need a jump, follow the vehicle manufacturer guidelines to safely attach jumper cables from another battery to yours, or use a battery charge kit. If you know you’ll be leaving the vehicle parked for a long time, disconnect the battery.

Windshield wipers tend to last about six months in dry and dusty conditions before they need replacing. Check wiper blades for cracks and brittleness, and whether the blades stick to the windshield. Before leaving your vehicle parked, take care of your wipers by wiping them down with a paper towel moistened with glass cleaner, and do it again before using them.

Consider cleaning and sanitizing the interior of the car before leaving it. Normally, automotive-specific cleansers are recommended, although isopropyl alcohol is an effective way to kill germs and viruses. Avoid bleach and hydrogen peroxide, as these chemicals can damage the interior of a vehicle. Do not use ammonia-based cleaners on car touch screens, as they can damage the anti-glare and anti-fingerprint layers. Apply leather conditioner to leather seats and other areas as a layer of protection, and wash and wax the exterior.

If leaving the vehicle for a few weeks or months keep the fuel tank full and add a fuel stabilizer. This will help prevent problems caused by condensation and evaporation in the tank. Most modern vehicles have plastic fuel tanks that don’t rust, but older tanks may, so they should be checked after a long rest.

Inspection
There are five fluids that keep your vehicle running smoothly and reliably: engine oil, coolant,
power steering fluid, brake fluid, and windshield washer fluid.

Performing a simple under-hood inspection will reduce long-term maintenance costs. If you discover a leak or another problem, have your mechanic take a look.

It takes a few minutes to conduct an under-hood inspection. Start with the fluid levels. Engine and transmission oil can be checked by turning the engine off and allowing it to sit long enough for the oil to return to the crankcase before measuring the engine oil level. Look for signs of oil or other fluid leakage on the exterior of the engine and surrounding components. Once a vehicle has been sitting in the same place for a few minutes, check for spots of oil or other fluids beneath it. It is no longer acceptable for a vehicle to “mark its spot” with a few drops of engine oil.

Tires can quickly develop flat spots, and these may not be fixable. This typically happens when tires are not properly inflated and sit in the same position for a long time. Follow the instructions in the car’s maintenance manual, or check the sticker on the inside of the driver’s door for recommended tire pressure. Moving the vehicle occasionally also helps prevent flat spots.

Air filters are easy to check and replace. Check both the air intake filter and the cabin air filter. If these are dirty and need replacing, you can buy new ones and change them yourself, or speak to a mechanic for help. Some filters are more difficult than others to access and a mechanic may be needed to make the change.

Following these steps is a cost-effective way to make sure your car is maintained, and keeps you safe on the road.
Find the two identical animals.

Find five differences between the two pictures.
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