

AT HOME! PROJECT NO.14

Make a Fake Wound

As family days out are put on hold, we've been thinking how we can make your family days in as much fun as possible.

Eureka! is the UK's only hands-on museum just for children aged 0-11. Full of exhibits to explore, helpful staff to engage with, activities to do and buttons to press. Based in West Yorkshire, we have brought smiles to the faces of over 8 million visitors since 1992. As families can't come to us, we are keen to bring a sample of the Eureka! experience to you.

Our expert staff have come up with a series of experiments that can be done at home, all designed to inspire children to get hands-on, have fun, and learn about themselves and the world around them.

Get experimenting and send us or share your pictures and videos using #EurekaAtHome and we'll share on our social media feeds too.

WE'RE ALL IN THIS TOGETHER!

No.14 MAKE A **FAKE WOUND**



Children love to explore the 'ickier' (but very important) elements of the human body.

Did you know that the skin is the largest organ in the human body? This activity is a fun way to learn more about what happens when the skin gets damaged and what can be more fun than getting a fake wound on your skin to scare your friends and family?! We've set out the instructions to follow to create the wound below plus we've included some science facts about how body protects itself.

YOU WILL NEED:

- Vaseline / petroleum jelly
- A small bowl
- **Red food colouring**
- Powdered cocoa
- White tissues







DIRECTIONS:

- **1.** Place a fingerful of jelly into a bowl
- pinch of cocoa. Mix well
- 3. Separate tissue into single layer



MAKE A FAKE WOUND





- 4. Rip out a 3-inch by 2-inch rectangle of tissue
- 5. Place tissue at wound site
- **6.** Cover tissue with coloured jelly

5.

6.

8.

- Shape the tissue by tearing it to form the wound's edges (sides of a wound are higher than its centre)
- 8. Rub sprinkled cocoa onto the wound's edges to make the edges dark, as though a scab is forming.
- 9. Share your wound with someone easily grossed out.

Top Tips!

If your jelly looks too red and transparent, stir in a pinch more cocoa powder to make it opaque, like real blood.

When you shape the tissue, think about what a wound looks like - the centre is bloody mucky and the tissue ridges along the outside are your ripped skin.

MAKE A FAKE WOUND



LEARNING ABOUT OUR BODIES

Wounds are essential for protecting our bodies. Scabs protect the healing skin underneath and stop bacteria from getting into the wound which could lead to infection. There are four basic steps that your body goes through to heal itself:

- Stopping the bleeding. When your skin is cut, scraped, or punctured, you usually start to bleed. Within minutes or even seconds, blood cells start to clump together and clot, protecting the wound and preventing further blood loss. These clots, which turn into scabs as they dry, are created by a type of blood cell called a platelet. The clot also contains a protein called fibrin, which forms a net to hold the clot in place.
- 2. Inflammation. Once the wound is closed with a clot, the blood vessels can open a bit to allow fresh nutrients and oxygen into the wound for healing. Blood-borne oxygen is essential for healing. The right balance of oxygen is also important — too much or too little and the wound will not heal correctly. Another type of blood cell, a white blood cell called a macrophage, takes on the role of wound protector. This cell fights infection and oversees the repair process. You might see some clear fluid on or around the cut at this time. That is helping clean out the wound. Macrophages also produce chemical messengers, called growth factors, which help repair the wound.

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- 3. Growth and rebuilding. Blood cells, including oxygen-rich red blood cells, arrive to help build new tissue. Chemical signals instruct cells to create collagen, which serves as a type of scaffolding, and other tissues to begin the repair process. Occasionally, you see the result of this process as a scar that starts out red and eventually dulls.
- 4. Strengthening. Over time, the new tissue gets stronger. You might notice stretching, itching, and even puckering of the wound as that happens. Within 3 months, the wound is almost as strong in its repair as it was before. If the wound was very severe, the entire healing process might take a couple of years to complete.

HERE IS A LINK TO A GREAT VIDEO FROM TED-ED EXPLAINING HOW A WOUND HEALS ITSELF!

https://www.youtube.com/ watch?v=TLVwELDMDWs

