

# Did you know: You can experiment with bandages?!

Engineering new ideas with "blood"!

## Water Absorbing Crystals

Water-absorbing crystals are polymers that, when exposed to water, form hydrogels. Hydrogels have many practical applications, such as use in contact lenses and diapers. In agricultural applications, hydrogels added to soils allow for larger and more efficient crop yields that use less water. Researchers are also discovering more ways to use hydrogels in medical settings, such as in the treatments of wounds or burns.

## Everyday Science: Band Aid Facts

The first adhesive bandage was invented in 1920 by Earle Dickson, a cotton buyer for the Johnson & Johnson Company in New Brunswick, New Jersey. The company sold them with the brand name "Band-Aids", and when introduced, they were the first dressings for small wounds that users could apply themselves.



## Health & Safety



Sometimes injuries that aren't traumatic or painful can bleed a great deal. Nicks from shaving, scrapes from falling off of a bike, and even pricking a finger with a sewing needle can result in excessive bleeding. For minor injuries such as these, you'll still want to stop the injury from bleeding. A sterilized bandage or Band-Aid, antiseptic spray, and a healing agent such as Neosporin can all be helpful in treating these injuries and preventing future infection.

Even with a minor cut, it's possible to have nicked an artery or blood vessel. If bleeding is still occurring after 20 minutes, medical attention is needed. Don't ignore a wound that won't stop bleeding just because it looks small or isn't painful.



- \*In 1500 BC, Ancient Egyptians used honey to protect wounds.
- \*The Greek physician Hippocrates washed wounds with vinegar!
- \*In the 1860s surgical gauze received an antiseptic upgrade!
- \*In 1888, Johnson & Johnson debuted the first commercial first aid kits.