



Fluids and **MAGNETIC** Creatures

8+

WARNING

Not suitable for children under 8 years of age • To be used under adult supervision

- The slimes are not suitable for food consumption.
- Do not ingest slime
- Wash your hands after use
- This set contains some elements that should not be mixed with chemical substances and/or with other substances not contained in the instruction book
- The incorrect use of the elements contained in the set can be harmful to health. Only carry out the experiments listed in the instructions.
- Do not inhale the powders or vapors
- Do not allow the elements to come in contact with parts of the body, in particular with eyes and mouth
- Keep small children and animals away from the experiment area
- Keep the set away from children under 8 years of age.
- Read the instructions before use, follow them and keep for future reference
- Interrupt use in case of redness, itching, or skin rash. Consult a doctor if the irritation persists
- This product contains a magnet. If ingested magnets can attract each other through intestinal walls causing serious injury. Seek medical attention immediately if a magnet is ingested
- The gloves contained in the set are manufactured from natural rubber latex. Natural rubber latex can cause allergies.

Contains The following substances:

IRON POWDER (10 gr)

CAS N° 7439-89-6

CE N° 231-096-4

Specific first Aid information:

IN CASE OF INGESTION: Drink 1 or 2 glasses of water.

Call a doctor. If possible drink milk afterwards.

EMERGENCY PHONE NUMBERS:

• UK 0845 46 47 / 08454 24 24 24

• USA 1-800-222-1222

• AUSTRALIA 000 / 13 11 26

SAFETY RULES:

- Read the instructions carefully before use, follow them and keep them as a reference.
- Keep small children, and animals and those not wearing eye protection away from the experiment area.
- Always wear eye protection.
- Keep this experiment set away from children under 8 years of age.
- Clean the equipment after use.
- Make sure all the containers are closed and properly stored after use.
- Wash your hands after carrying out the experiments.
- Do not use equipment different from that supplied with the set or advised in the instructions.

General first aid Information:

- In case of contact with eyes: rinse well with water, keeping eyes open if possible. Consult a doctor immediately.
- In case of ingestion: wash mouth well with water, drink fresh water. Do not provoke vomiting. Consult a doctor immediately
- In case of inhaling: take the person into the fresh air.
- In case of contact with skin or burning: wash the interested part with water for 10 minutes.
- In case of doubt, consult a doctor immediately. Show the doctor the chemical product and the container.
- In case of injury, always consult a doctor.

RECOMMENDATIONS FOR SUPERVISING ADULTS:

- Read and follow the instructions, safety rules and first aid information and keep as a reference.
- The improper use of the chemical substances can be harmful to health. Only carry out the experiments listed in the instructions.
- This experiment set can be used only by children above 8 years of age.
- Since the skills of children vary considerably, even within the same age groups, supervising adults should assess which are, at their own discretion, the most suitable and risk-free experiments for children. The instructions should allow supervising adults to assess each experiment and determine their suitability for a particular child.
- The supervising adult should discuss the safety warnings and information with the child (s) before starting the experiment. Particular attention Should be paid to safety when handling acids, alkalis and flammable liquids.
- The area around the experiment should be free of obstacles and far from places where food is kept. It Should be well lit and ventilated and close to a water supply. A solid table should be used, with a heat resistant surface.



SCIENCE AS YOU'VE NEVER SEEN IT BEFORE



If you are reading this manual, it means that you have ventured into the world of **CRAZY SCIENCE**, where science is terrifyingly fun! And this is mostly thanks to me: **CILLO!**





I'm starting to remember... doctor Mag was an old classmate of mine. I remember him at the **MAGNETICFREAKOLOGY** classes! He always asked lots of strange questions and always carried around strange jars full of who knows what. Nobody ever found out what they contained, but I know people who swear they saw them moving...by themselves! Maybe he's back in action, we'd better investigate!

HERE'S ANOTHER
BUSYBODY.
PEOPLE DON'T KNOW
WHAT TO DO WITH
THEIR TIME.

THAT THING
IS FOLLOWING
ME!



ALARM
INTRUDERS



DOCTOR MAG
RUN QUICKLY!



NUISANCES



We have reached a gloomy laboratory full of cans
and containers. They contain fluids ...

FLUIDS EVERYWHERE!



ANOTHER
SCIENTIST THAT
CREATES FLUIDS
HOW BORING.

AND WHAT
IS SO SPECIAL
ABOUT THEM?

SILLY DON'T YOU
KNOW MY FLUIDS
ARE SPECIAL?

THEY ARE
ALIVE!



OH BOY!
I WANT TO
KNOW MORE!

Magnetic LAB

A LIVING... POWDER!

A LIVING... POWDER!

At the base of our fluid and horrifying creatures there is a special powder that can "come to life" if encouraged in the right way. Do you want to find out how?

1. AWAKEN THE POWDER

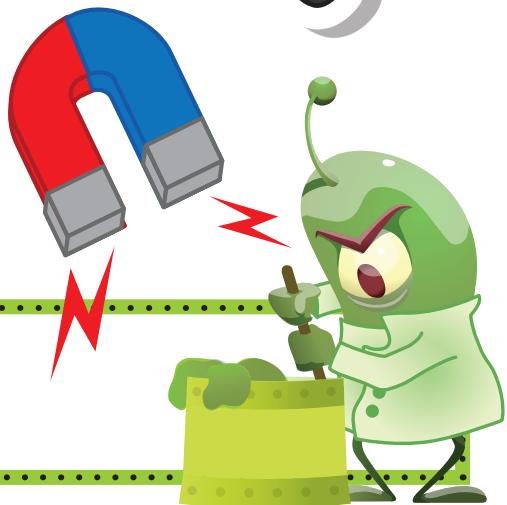
WHAT YOU WILL NEED:

- Iron powder
- The jar
- The magnet

WHAT TO DO:

- Pour the iron powder into the jar
- Place the magnet near the jar until it touches the side

TO FIND OUT MORE,
THERE IS ONLY ONE WAY:
PUT YOURSELF IN THE
SHOES OF THE SCIENTIST
AND GET BUSY!



OBSERVE
THE POWDER TAKE
LIFE IT CREATES
STRANGE POINTY SHAPES
AND FOLLOWS YOU!



Doctor Mag's

spikey magnetic creatures



2. THE INVISIBLE LEASH

WHAT YOU WILL NEED:

- Iron powder
- Magnet

YOU WILL ALSO NEED:

- A piece of cardboard

WHAT TO DO:

- Place the cardboard on your work surface
- Spread a little iron powder on the cardboard
- Pass the magnet **under** the cardboard and watch the creature come to life and be "captured" on a leash by an incredible mysterious force!



THE CRAZY SCIENCE

...and Funny

BEHIND

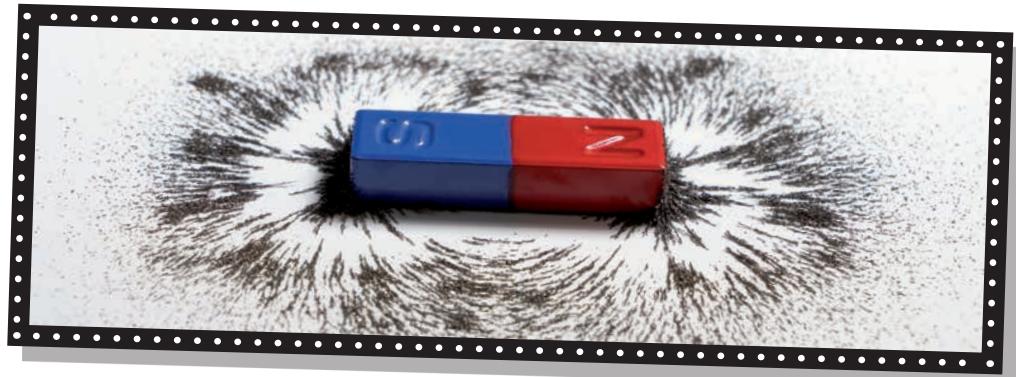


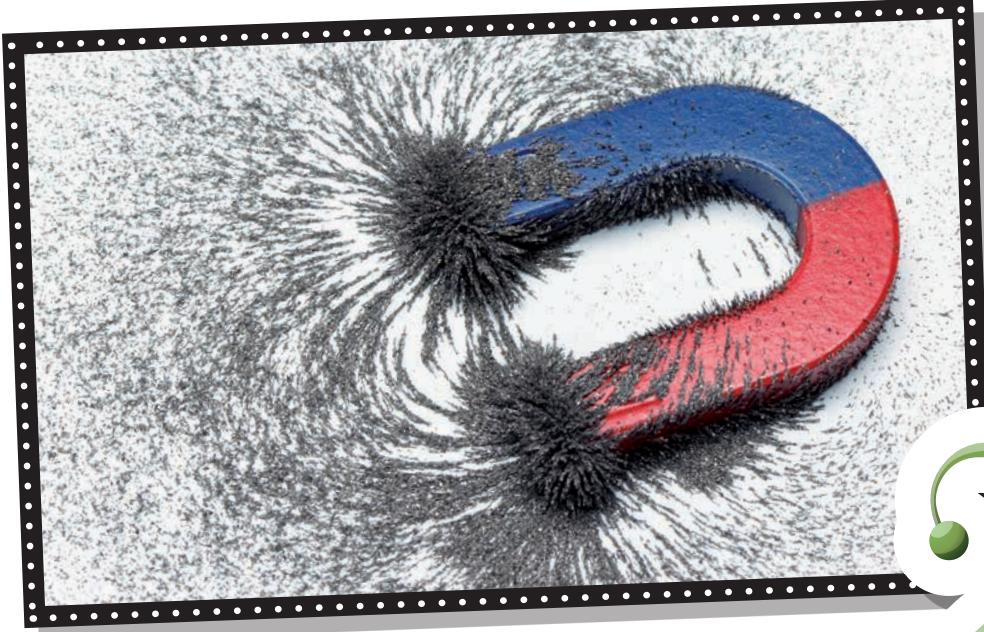
An invisible force... or almost!

The presence of a magnet modifies the space around it. We can notice this by putting the magnet near the iron powder. Every grain takes a bit of its magnetic power and acts like a microscopic compass: do you see the "spikes"?



If on the other hand you spread the powder on a piece of cardboard and let the magnet go to work, you will see the powder take certain paths, "drawing" the so-called **lines of a magnetic field**. It's them that give life to our creatures! Every type of magnet does it in its own way, as you can see in the following photos.





With a magnet you can also... **lose your way** forcing the magnetic needle to point in another direction.
Seeing is believing!

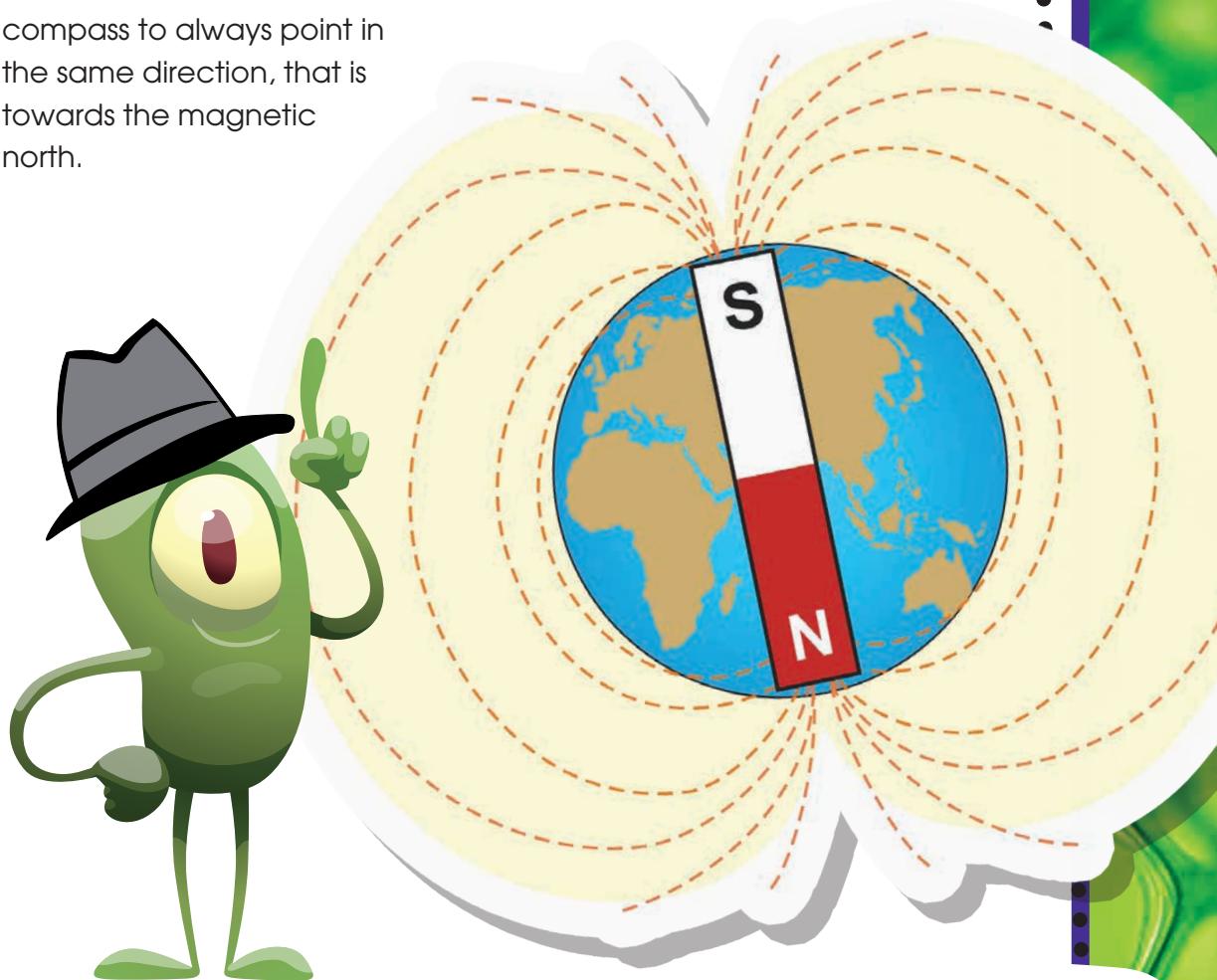


ORIENT YOURSELF THROUGH MAGNETISM

Talking about compasses have you ever wondered how this precious instrument always points us to the north?

This strange but useful phenomenon is caused by no other than, our Planet! It is precisely the Earth, thanks to its particular composition, which acts like a huge magnet with a south and north pole.

As such it forces the needle of the compass to always point in the same direction, that is towards the magnetic north.



3. THE HIDDEN CREATURE

WHAT YOU WILL NEED:

- Iron powder
- The jar
- The spatula
- The magnet

YOU WILL ALSO NEED:

- Ground black pepper
- A paper tissue



WHAT TO DO:

- Pour some iron powder into the jar
- Add some pepper
- Mix well with the spatula until the two elements cannot be distinguished

Your creature is now hidden. To make it appear follow these instructions.

- Cover the magnet with a piece of tissue (so the powder does not stick directly to it)
- Pass the magnet over the mixture of iron and pepper and watch: the creature will appear and attach itself to the magnet. This way you can separate it from the pepper and use the powder for other experiments!



NOW THAT DOCTOR MAG'S SECRET HAS BEEN REVEALED WE CAN GIVE LIFE TO INCREDIBLE MAGNETIC CREATURES TOO!

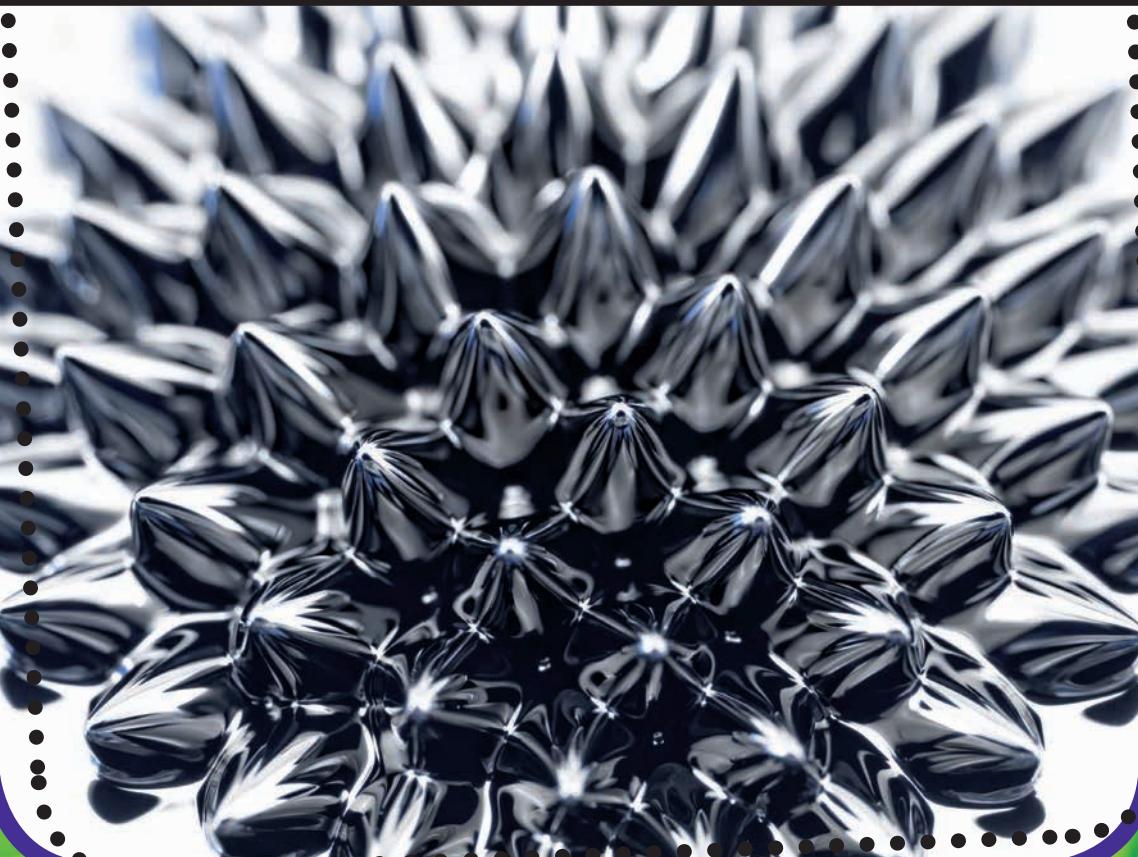
4. SILVER MAG (THE SHINY CREATURE)

WHAT YOU WILL NEED:

- Transparent Glue • Liquid Activator • Iron powder • Silver coloring • Jar and spatula

WHAT TO DO:

- Put a spoon of transparent glue into the jar
- Add the tip of a spatula of iron powder
- Start to mix and, without stopping, add the liquid activator, a drop at a time
- Continue to stir until the mixture becomes soft and sticky
- Add the coloring and stir again, until the creature becomes a uniform color.





WAKE UP THE
CREATURE WITH
THE MAGNET.

YOU JUST HAVE
TO PLACE IT NEAR
THE OUTSIDE OF
THE JAR!

NOW TAKE IT OUT OF
THE JAR AND LET IT WALK.
IT WILL FOLLOW YOU
LIKE A PUPPY!

THE CRAZY SCIENCE

...and Funny

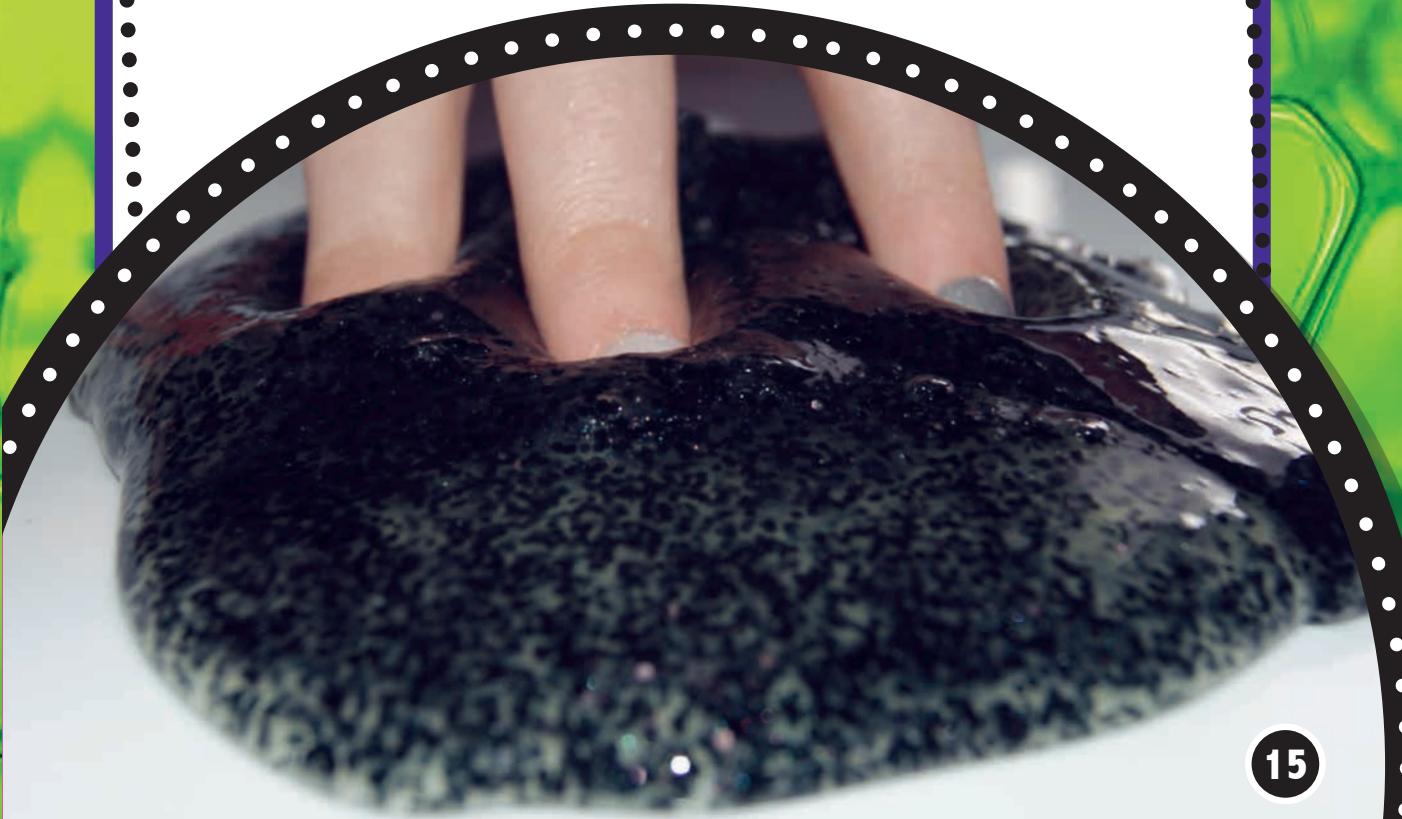
BEHIND



THIS CRAZY IRRESISTIBLE SLIME!

In the procedure that gave life to our first creature you will certainly have recognized the recipe for SLIME, that is the special slimy fluid which is so fun to play with. But what is its secret?

The glue used in the “recipe” is based on **POLYVINYL ALCOHOL (PVA)**. This substance is a **POLYMER**; Each of its molecules is formed by very long chains of more simple repeated units. Under normal conditions, these chains can easily flow one onto the other, just like a liquid. By adding the activator to the glue, however, we can significantly increase the **VISCOSITY**, that is the difficulty to flow: that’s how it becomes doughy and... squishy!



5. BLACK MAG

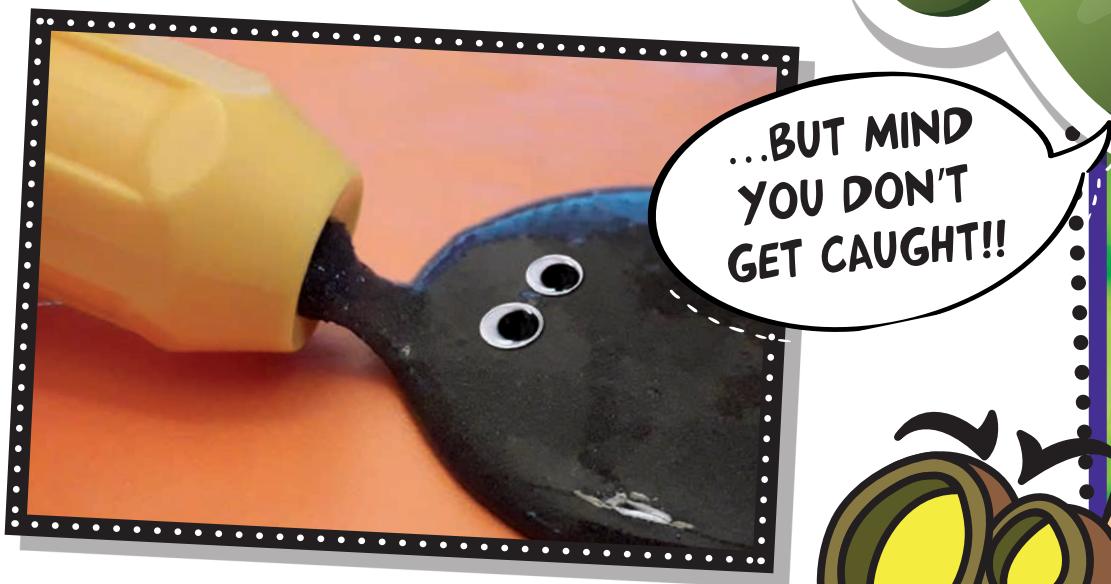
(THE TENTACLED
BLACK CREATURE)

WHAT TO DO:

Follow the procedure described in the previous experiment, without adding the color. The more **powder** you add the darker the frightening creature will become!



NOW USE
THE MAGNET TO
MAKE ITS TENTACLES
APPEAR!



6. LEMON MAG (THE ACIDIC METALLIC CREATURE)

WHAT YOU WILL NEED:

- Transparant glue
- Liquid activator
- Iron powder
- Yellow coloring
- Jar and spatula
- Magnet

WHAT TO DO:

- Follow the instructions described in the previous experiment, replacing the silver color with the yellow one.
- Dose the color based on the intensity of yellow you want to obtain, considering that the iron powder will give a bronze effect to everything
- Give life to your creature with the magnet... take it for a walk!

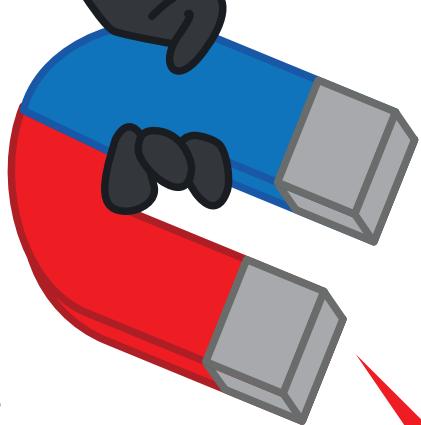
CILLO ADVISES

Do you want to make your creature even more "ALIVE"
add EYES and NOSE you will find them in the kit.



Our creatures are increasing in number and some of them are tightening troubling alliances: better be on your guard!

In the meantime, let's be dragged into the vortex of **VARIANTS** and give life to magnetically insane creatures of the most varied appearances! We'll need some extra material, which we can easily find at home or at the supermarket. Are you ready?



OKAY BUT
LET'S NOT
EXAGGERATE!



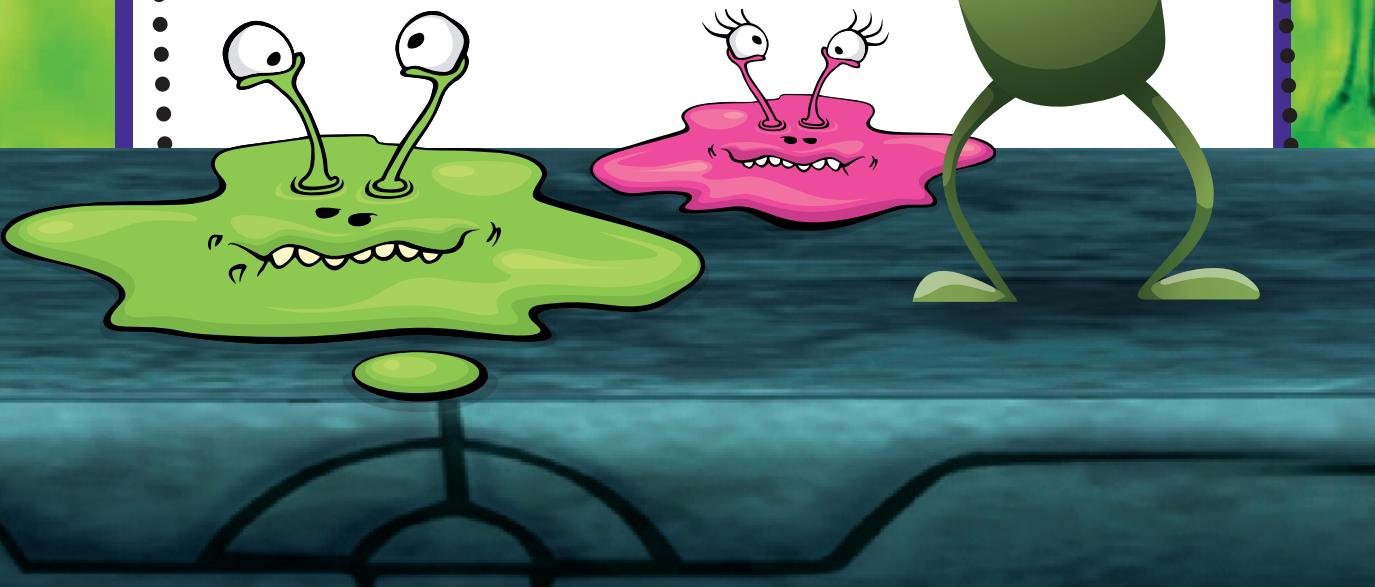
7. MARBLE WHITE MAG

Follow the same procedure used for the BLACK MAG creature, but replace the transparent glue with **VINYL GLUE**.
The iron powder will give the fluid the typical dotted marble look.



8. METALCOLOR MAG

Try using new colors (food coloring is fine).
The iron powder will give the creature an electrifying metallic effect!





Finally, if you still have a little iron powder left, let's discover the underwater metallic creatures!





WHAT YOU WILL NEED:

- Iron powder
- Water
- Jar
- Magnet

WHAT TO DO:

- Fill the jar with water
- Add the iron powder
- Place the magnet on the outside of the jar and watch the underwater creature come to the surface!

CILLO ADVISES



Have fun as much as you can with the magnetic creatures because in a short time the moisture that characterizes them will start to make the iron powder **rust**, destroying them. Remember that when you throw them away, they must be disposed in the proper way: these are special wastes!



EVEN THIS ADVENTURE
HAS ENDED AND, AS ALWAYS,
WE OF CRAZY SCIENCE HAVE
DONE GREAT: SEE
NEXT TIME, GUYS!



DOCTOR BACILLUS CLAUSII OR CILLO FOR SHORT

Our Bacillus Clausii, or Cillo for his friends,
is a good bacteria for our health!

We know very little about him though!

We don't know for example when or where he was born,
but we do know for certain that he is very, very small,
and he is an intrepid adventurer a true

luminous a first rate scientist!

Cillo is the founder of a very prestigious school:
it is famous all over the world because in its
classrooms fun and education go hand in hand.

We're talking about Crazy Science and Fun,

the name says it all about the programme!

Here we study the sciences, and above all the strangest
sciences, the most intriguing, the most fun...
and the most monstrous of course!



CRAZY SCIENCE

...and Funny

