



Do you have questions? Write to:
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In these times we would like to share with you some investigative ideas from our 10 years of experience as researchers with the "House of Little Explorers". What about doing some experiments TOGETHER as a family and collecting all your knowledge in a research diary!

Today you will take a close look at ballpoint pens!

You will need:

- several pens
- paper and pencils

Disassemble a ballpoint pen!

- 💡 Sketch all parts!
- 💡 Now put your pen back together. TIP: First lay down all the parts in the way you want to assemble them.
- 💡 What parts does your pen really need? Leave parts out... when does it still work?

Disassemble other ballpoint pens!

- 💡 Do all pens consist of the same parts?



Dear parents:

Children love to find out how things work. Disassembling and analysing these is a sensible method to do so. Ballpoint pens have a straightforward mechanism that can be quite easily understood after disassembly. When pressed, the spring on the reservoir is compressed and held in this position by a simple mechanism – until the next click. Some pens have a second spring. It is located on the end of the push-button and ensures that the button returns to its original position after being pressed.

Ask your children: Can you find the ball on the ballpoint pen? What do you think the spring does? What happens if you reassemble the pen without the spring? What do you think, how the trigger mechanism works inside the ballpoint pen?