

# PIN THE PLANET!

## FIND THE COUNTRIES OF ORIGIN OF RAW MATERIALS



Making a mobile phone requires a wide range of metals and other raw materials from all around the world.

Many of these are mined under difficult and problematic conditions and are therefore known as "conflict minerals".

But where do they actually come from?

### Where do the raw materials come from?

Look at the world map and the pins with the resources. Cut the pins out.

Research where the raw materials come from.

Match the pins with the countries of origin.  
Note: There are several possible answers for most of the resources!

Discuss: Which continents and countries are particularly rich in raw materials? Where are they located?

?



## Match the countries of origin!





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You can find all these resources in a mobile phone! Cut them out and explore in which countries they can be found. Choose the country where most of this metal is mined!





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## FIND THE COUNTRIES OF ORIGIN OF RAW MATERIALS



Now look at the countries. Which country is which? And – where is which mineral mined? Cut them out as well and match the pairs! Then pin the places on the world map!



The countries are:  
**Democratic Republic of Congo, China, China, Australia, Indonesia, Peru, Indonesia**



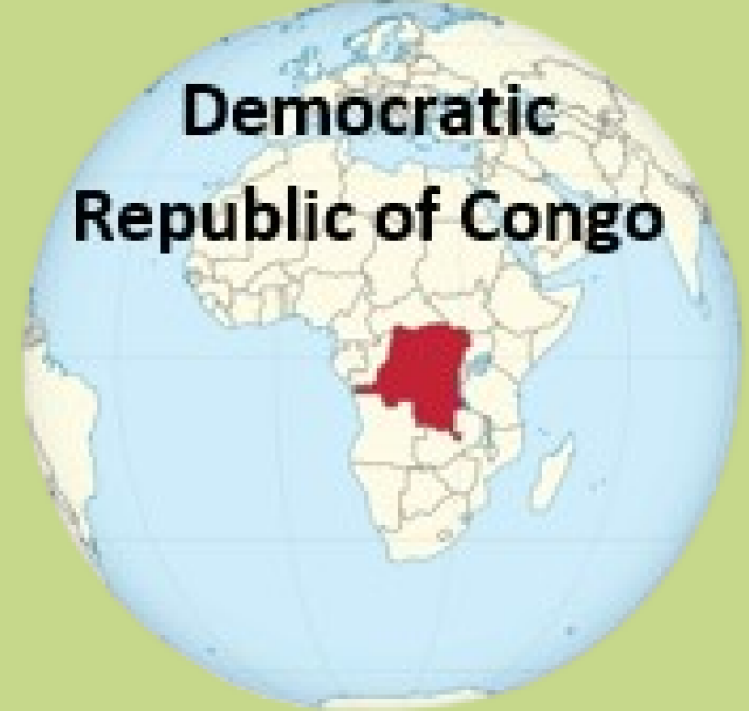


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## FIND THE COUNTRIES OF ORIGIN OF RAW MATERIALS



Now look at the countries. What do you think:  
Where is which mineral mined? Cut them out as  
well and match the pairs!  
Then pin the places on the world map!



Can you find these countries on the map?  
**Democratic Republic of Congo, China,  
China, Australia, Indonesia, Peru, Indonesia**





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**Cobalt** comes mainly from the **Democratic Republic of Congo** and is used for **rechargeable batteries**.

Unfortunately, this raw material is becoming increasingly scarce. One battery contains approx. 6.3 grams of cobalt.

**Aluminum** is an important building material and is found in **Australia**. Aluminum is used in cell phones, for example, to **shield the electronics from electromagnetic radiation**.

**Nickel** comes from **Indonesia**. It is used in a cell phone for **electrical connections** and **so-called capacitors**. These are components for storing electrical charges.

The most important country that mines **tin** is **China**. In electronic devices, tin is used for **soldering**, where it bonds individual components to the copper layer of the circuit board.

**Silver** comes from **Mexico** and is used for the **keyboard mat** and the **circuit board** of a cell phone. In one smartphone contains around 306 milligrams of silver.

Yes, really – there is real **gold** in a cell phone! It is mined in **South Africa**, for example, and used for the **contacts of the SIM card** and on the **battery**.

**Copper** comes from **Chile**, for example. It is a very important metal for **wires** and **printed circuit boards**.





# KEY – PIN THE PLANET!



Democratic Republic of Congo (DR Congo)



Australia, China, Guinea, Brasilia, India;



Indonesia, Philippines, Russia, New Caledonia,  
Canada, Australia, China;



China, Indonesia, Malaysia, Vietnam, Peru,  
Bolivia, Brazil, DR Congo, Niger, Rwanda,  
Nigeria and Australia.



Mexico, Peru, China;



China, Australien, Russia, USA, Canada;



Chile, Russia, China;





# SOURCES – PIN THE PLANET!

## FIND THE COUNTRIES OF ORIGIN OF RAW MATERIALS

### Sources of Pins (as of April 2022)

Cobalt mined e.g. in the Democratic Republic of Congo

<https://de.wikipedia.org/wiki/Cobalt#/media/Datei:Skutt%C3%A9rudite.jpg>

Aluminum mined e.g. in Australia

<https://de.wiktionary.org/wiki/Aluminium>

Nickel mined e.g. in Indonesia

[https://de.wikipedia.org/wiki/Nickel#/media/Datei:Nickel\\_kugeln.jpg](https://de.wikipedia.org/wiki/Nickel#/media/Datei:Nickel_kugeln.jpg)

Tin mined e.g. in China

[https://de.wikipedia.org/wiki/Zinn#/media/Datei:Zinn\\_Mory\\_Barren.jpg](https://de.wikipedia.org/wiki/Zinn#/media/Datei:Zinn_Mory_Barren.jpg)

Silver mined e.g. in Mexico

[https://upload.wikimedia.org/wikipedia/commons/1/16/Silver\\_Bar\\_01.jpg](https://upload.wikimedia.org/wikipedia/commons/1/16/Silver_Bar_01.jpg)

Gold mined e.g. in China

<https://pixabay.com/de/illustrations/gold-goldbarren-barren-feingold-1013618/>

Copper mined e.g. in Chile

<https://pixabay.com/de/photos/draht-kupfer-elektro-stop-closeup-2681887/>

### Sources of countries (as of April 2022)

Democratic Republic of Congo

[https://de.wikipedia.org/wiki/Demokratische\\_Republik\\_Kongo](https://de.wikipedia.org/wiki/Demokratische_Republik_Kongo)

Australia

<https://de.wikipedia.org/wiki/Australien>

Indonesia

<https://de.wikipedia.org/wiki/Indonesien>

China

[https://de.wikipedia.org/wiki/Volksrepublik\\_China](https://de.wikipedia.org/wiki/Volksrepublik_China)

Mexico

<https://de.wikipedia.org/wiki/Mexiko>

Chile

<https://de.wikipedia.org/wiki/Chile>

