

## **Rare-Earth Elements**

- $\checkmark$  What are they?
- $\checkmark$  What are they used for?
- ✓ Where are they produced?
- $\checkmark$  What is dangerous about their processing?

What are Rare-Earth Elements?

- REE = Rare Earth Elements
- metals made up by 17 chemical elements combined with minerals
- not that rare exist all over the world, found in rocks and soil

 $\rightarrow$  have to be extracted

• "Seltene Erden" – weder selten, noch Erden



## NEODYMIUM



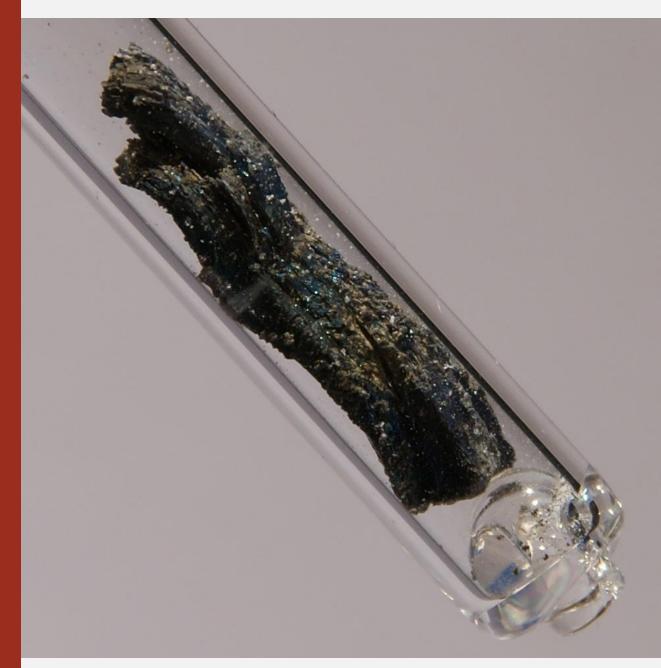


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Bastnäsite

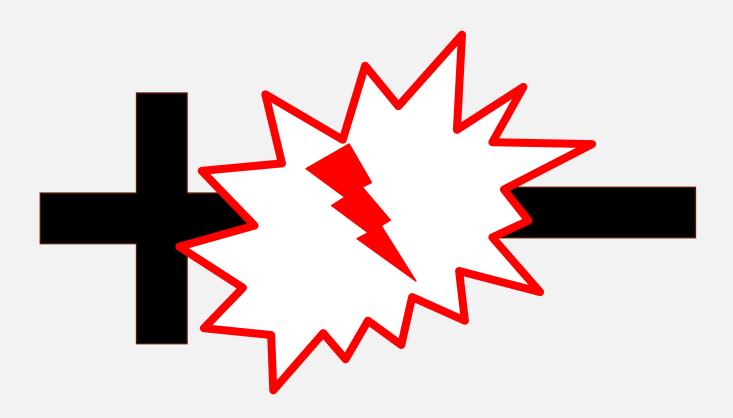
ore

## EUROPIUM



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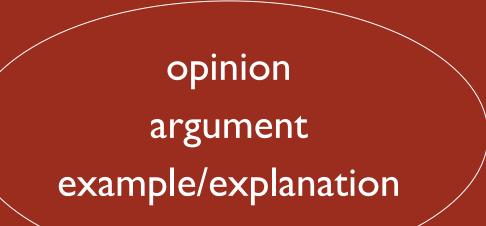
Plan for today: pro-contra discussion



#### How to have a procontra discussion

# Goal?

# not your opinions!!!



## **Useful words or phrases:**

- I agree/disagree because...
- Firstly, secondly, furthermore, finally...
- More important is that...
- The fact is that...
- There are many reasons for/against...
- What you said is only partly true, because...
- The problem is that...
- Let me give you an example...



Find arguments for <u>your side</u> (pro or contra)!
Prepare so you can <u>convince the others</u> of your arguments!

*Tip: the bold words in your material highlight possible arguments, but you can also think of more yourself.* 

## Until your break (~30 minutes):

individual work

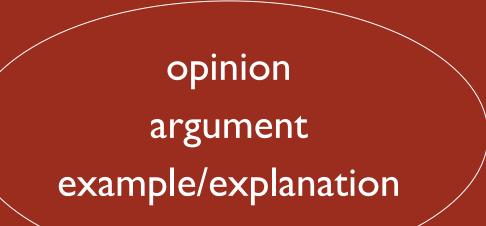
After your break (max. 15 minutes):

work together

#### How to have a procontra discussion

# Goal?

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## **GROUP WORK**

opening statement  $\rightarrow$  in English

Take another look at the *Tip* at the top of your material.

Think of arguments the other team might give and find counter-arguments.

## Pro vs. Contra Discussion

Pro REE	Con REE