



# European Week for Waste Reduction INVISIBLE WASTE

21 - 29 November 2020

What's your real weight?

#EWR2020 #invisiblewaste

[www.ewwr.eu](http://www.ewwr.eu)

## EVROPSKI TEDEN ZMANJŠEVANJA ODPADKOV 21. – 29. novembra 2020

Kakšna je tvoja prava teža?

Nov prenosni računalnik tehta 3 kg, vendar ob njegovi izdelavi nastane 1200 kg odpadkov.

# OGLEJ SI POSNETKA



[https://www.youtube.com/watch?v=A6qJPd9S2pY&feature=emb\\_logo](https://www.youtube.com/watch?v=A6qJPd9S2pY&feature=emb_logo)

[https://www.youtube.com/watch?v=ivUG546Fs\\_0&feature=emb\\_logo](https://www.youtube.com/watch?v=ivUG546Fs_0&feature=emb_logo)

# ELEMENTI V PAMETNIH TELEFONIH

ELEMENTS COLOUR KEY: ● ALKALI METAL ● ALKALINE EARTH METAL ● TRANSITION METAL ● GROUP 13 ● GROUP 14 ● GROUP 15 ● GROUP 16 ● HALOGEN ● LANTHANIDE

## SCREEN



Indium tin oxide is a mixture of indium oxide and tin oxide, used in a transparent film in the screen that conducts electricity. This allows the screen to function as a touch screen.



The glass used on the majority of smartphones is an aluminosilicate glass, composed of a mix of alumina ( $Al_2O_3$ ) and silica ( $SiO_2$ ). This glass also contains potassium ions, which help to strengthen it.



A variety of Rare Earth Element compounds are used in small quantities to produce the colours in the smartphone's screen. Some compounds are also used to reduce UV light penetration into the phone.

## BATTERY



The majority of phones use lithium ion batteries, which are composed of lithium cobalt oxide as a positive electrode and graphite (carbon) as the negative electrode. Some batteries use other metals, such as manganese, in place of cobalt. The battery's casing is made of aluminium.

## ELECTRONICS

Copper is used for wiring in the phone, whilst copper, gold and silver are the major metals from which microelectrical components are fashioned. Tantalum is the major component of micro-capacitors.



Nickel is used in the microphone as well as for other electrical connections. Alloys including the elements praseodymium, gadolinium and neodymium are used in the magnets in the speaker and microphones. Neodymium, terbium and dysprosium are used in the vibration unit.



Pure silicon is used to manufacture the chip in the phone. It is oxidised to produce non-conducting regions, then other elements are added in order to allow the chip to conduct electricity.



Tin & lead are used to solder electronics in the phone. Newer lead-free solders use a mix of tin, copper and silver.



## CASING



Magnesium compounds are alloyed to make some phone cases, whilst many are made of plastics. Plastics will also include flame retardant compounds, some of which contain bromine, whilst nickel can be included to reduce electromagnetic interference.





RECIKLIRAJ:

[https://www.youtube.com/watch?v=zM62QgO3RZQ&feature=emb\\_logo](https://www.youtube.com/watch?v=zM62QgO3RZQ&feature=emb_logo)

PONOVNO UPORABI:

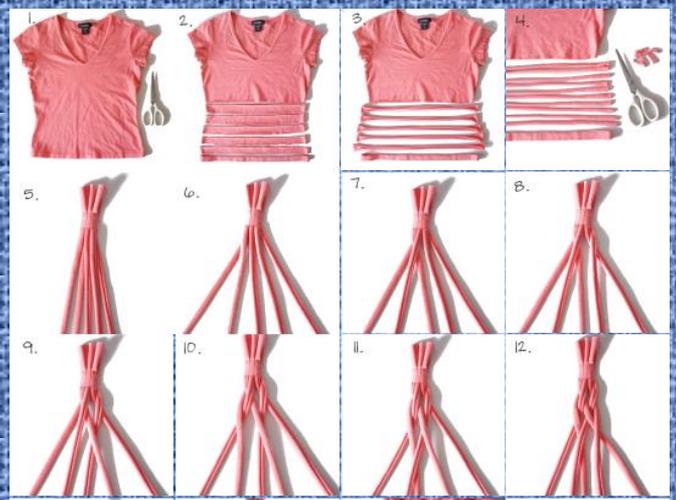
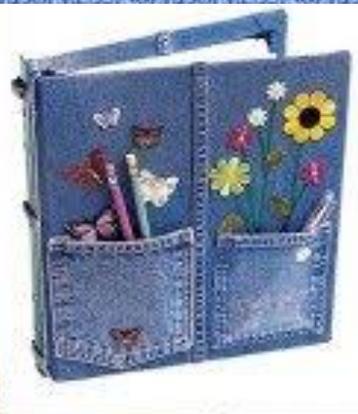
[https://www.youtube.com/watch?v=GXDPPpU2gaU&feature=emb\\_logo](https://www.youtube.com/watch?v=GXDPPpU2gaU&feature=emb_logo)

ZMANJŠAJ:

[https://www.youtube.com/watch?v=Mh-gFOoTYrc&feature=emb\\_logo](https://www.youtube.com/watch?v=Mh-gFOoTYrc&feature=emb_logo)

❖ NATEČAJ: IZDELAVA  
UPORABNEGA IZDELKA IZ  
ODPADNEGA MATERIALA -  
TEMA: **NE ZAVRZI OBLEK,**  
**OHRANI PLANET.**

NAJBOLJŠI IZDELKI BODO  
NAGRAJENI Z EKO TOČKAMI.



ZA ŠE VEČ IDEJ, V BRSKALNIK ZAPIŠI:

- T-SHIRT BAG recycling ideas,
- HEADBAND recycling ideas,
- FABRIC recycling ideas,
- JEANS recycling ideas.

RAZSTAVA IZDELKOV

BO NA

SPLETNI STRANI ŠOLE.