

# Conflict minerals clampdown

The *Securities and Exchange Commission* has ruled that U.S.-listed manufacturers such as Apple and Boeing must scrutinise the sources of four metals to make sure they don't help fund human rights abuses

## ANATOMY OF A SMART PHONE

**50**  
**Sn**  
Tin

**Tin aka *stannum* (Latin)**  
Silvery, malleable metal that does not easily oxidize in air

**Source:** Cassiterite

**Use:** Circuit board **solder** and battery **anodes**

**73**  
**Ta**  
Tantalum

**Tantalum from *Tantalus* (Greek mythological figure)**  
Rare, hard, lustrous metal.

Highly corrosion resistant

**Source:** Columbite-tantalite (Coltan)

**Use:** **Capacitors** (electrical storage)

Companies must make "reasonable" attempts to find out if materials came from **Democratic Republic of Congo**, where mines are supporting violent armed groups

Screen

Back plate

Circuit board

Ear piece

Camera

Battery

SIM card uses gold connectors

Front cover

Micro USB

**79**  
**Au**  
Gold

**Gold aka *aurum* (Latin)**  
Dense, soft, malleable metal

**Source:** Nuggets or grains in rock and alluvial deposits

**Use:** **Connectors** – does not corrode in air like silver and copper

**Source:** Wire agencies

**74**  
**W**  
Tungsten

**Tungsten from *tung sten* (Swedish) meaning "heavy stone"; aka *wolfram* (German).** Hard, rare metal

**Source:** Wolframite

**Use:** **Vibration motor**