

Youtube Video: What's in your Smart Phone Name: _____ Block: _____

A typical smartphone contains about _____ of _____ and _____ mg of _____. In 2014, the Au and Ag used to manufacture phones, this year alone cost more than _____ dollars. You cannot do anything with your phone without a _____. The power source is probably composed of a _____ ion battery. They use a Lithium-_____-oxide for the cathode. Cathode's are the _____ side of a battery. The negative side of the battery is usually _____ or _____ called the _____ and it produces electrons and a cathode absorbs them which gives the juice to power your phone. Some phone batteries use _____ in place of cobalt and all phone batteries and sometimes your whole phone is encased in _____. The smart phone screen contains some of the rarest elements on earth. Examples of rare elements in your cell phone screen is called _____ with the elemental symbol _____, _____ with symbol of _____, _____ with symbol _____ and _____ with symbol _____. These all help produce the _____ on a smartphone _____.

Ion strengthened glass is glass dipped in a bath of hot potassium(symbol _____) and salt (_____). Potassium ions squeeze themselves into holes left by _____.

This compresses the glass and makes it stronger. What puts the touch in touch screens are _____ (_____), _____ (_____) and _____ (_____). They're used in a transparent film that _____ electricity, so the touch screen can function. After smashing your phone open you will

see another hidden chemistry world. _____ (_____) is the main wiring in your phone as well as the tiny electrical components. Engineers also use a metal called _____ (_____) to make tiny capacitors. Capacitors _____ and _____ electricity. _____ (_____) is used to make the microchips of your phone, which are the brains of the whole operation. In the chip, it's combined with _____ (_____), _____ (_____), and _____ (_____), _____ (_____) and _____ (_____) to produce a powerful, highly conductive chip.