



You don't need to be an enthusiastic DIY person, but you still might need to repair something at home. What are your options when you need to join metal or wood?

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# Joining Techniques

1. Listen to the article. Are the statements true (T) or false (F)? Write the correct words.

- a. Non-permanent joints can be damaged when taking them apart. \_\_\_\_\_
- b. Screws and bolts can be fully or partially threaded. \_\_\_\_\_
- c. Joints using bolts are stronger than riveted joints. \_\_\_\_\_
- d. Welding is used more than riveting in aircraft. \_\_\_\_\_
- e. The tool you use to solder things is called a soldering iron. \_\_\_\_\_
- f. Lower temperatures make stronger soldered joints. \_\_\_\_\_



## 2. Choose the correct option in the sentences below.

### PICTURE VOCABULARY



A. nuts



B. bolts



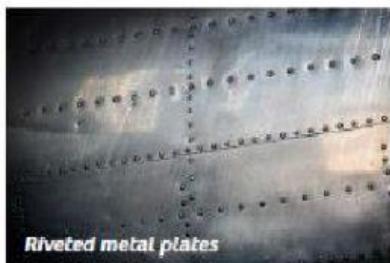
C. screws



D. washers

- a. Bolts and screws can be made *of/from/by* different materials.
- b. Stainless steel is very strong and will keep *a/it/its* strength *at/in/to* very high or low temperatures.
- c. The easiest way *for/how to/to* join two materials together is to use screws.
- d. In the past, rivets *was used/were used/used* to build bridges and ships.
- e. Welders *have/must/must to* keep strict safety rules.
- f. *Although/However/Unlike* welding, soldering does not involve melting the metal parts.

## 3. Listen to the part about riveting. Write T / F and the correct words.



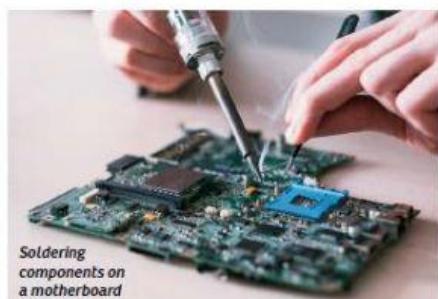
Riveted metal plates

- a. Rivets fasten metal plates together using heat. \_\_\_\_\_
- b. Riveting is often replaced by soldering. \_\_\_\_\_
- c. Nowadays, riveted joints are still used in electronics. \_\_\_\_\_
- d. Aluminium, which is used for the construction of aircraft bodies, gets stronger when exposed to heat. \_\_\_\_\_

e. Riveted joints are as strong as ones made using screws and bolts. \_\_\_\_\_

## 4. Listen to the part about soldering and fill in the missing words. Use up to three words.

- a. Soldering is used in plumbing, \_\_\_\_\_ and metalwork.
- b. It's used to join different types of \_\_\_\_\_ by melting solder.
- c. A soldering iron is an \_\_\_\_\_.
- d. The solder has a lower \_\_\_\_\_ than the joined metal parts.
- e. Hard (silver) soldering \_\_\_\_\_ a temperature above 450°C.



Soldering components on a motherboard

## 5. Match the English and Czech terms

Cast iron	hliník
Alloy	mosaz
Brass	nerez ocel
Bronze	litina
Stainless steel	slitina
Aluminium	bronz
Tin	měď
Copper	cín

### VOCABULARY

- <sup>1</sup> non-permanent joint [dʒɔ:pənt] – rozebirateľný spoj
- <sup>2</sup> property [prəpəti] – vlastnosť
- <sup>3</sup> corrosion resistant [kə'rəʊʒn rɪ'zɪstant] – odolný proti korozi / korozivzdorný
- <sup>4</sup> shaft [ʃa:t] – dŕžka
- <sup>5</sup> thread [θred] – závit
- <sup>6</sup> to loosen ['lu:sn] – povoliť
- <sup>7</sup> rivet ['rɪvɪt] – nýť
- <sup>8</sup> to fasten ['fa:sn] – spojiť
- <sup>9</sup> welding [weldɪŋ] – svařovanie
- <sup>10</sup> to melt [melt] – tátiť
- <sup>11</sup> soldering ['səuldəŋ] – pájenie
- <sup>12</sup> plumbing ['plæmɪŋ] – instalatérstvo
- <sup>13</sup> insulated ['ɪnʒjuleɪtɪd] – izolovaný
- <sup>14</sup> blowtorch ['bləʊtɔ:tʃ] – pájecí lampa