




# Ten Brick Challenge – Illumination Creation



**Explore** – Check out the [Illumination](#) lesson to learn about different light sources. Then, try this Ten Brick Challenge!



A **Constraint** is a limitation or a restriction for completing a certain task. In this challenge your constraint will be to *only* use ten LEGO® bricks or elements to design your model.



**Extend** – Can you create a new design with fewer elements? Alternatively, select ten elements for a partner. Are they able to build effectively with the material constraints you selected?

**Challenge** - Can you design a flashlight that uses ten or fewer LEGO® bricks or elements? Then, code the Light Matrix to turn on and off. Test and evaluate your creation. Make modifications to improve your flashlight and test again. You can program your flashlight to display different colors and patterns.

