## Ten Brick Challenge – Design for You – Spinning Snowflake



**Explore** – Check out the <u>Design for You</u> lesson to explore the engineering design process and prototype creation. Then, try this Ten Brick Challenge!



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



**Extend** – Can you create a new design with <u>fewer</u> 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 snowflake model and program it to spin? Design a prototype using at least one motor. In this challenge, your prototype should only add ten (or fewer) LEGO bricks or elements. Share your invention with a peer. Reflect on how the constraints of this challenge influenced your design decisions.



