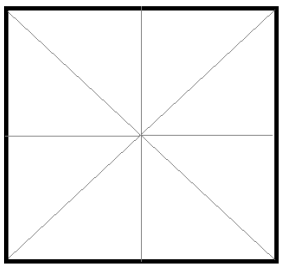
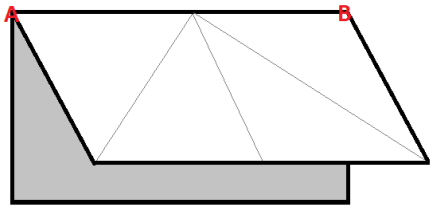
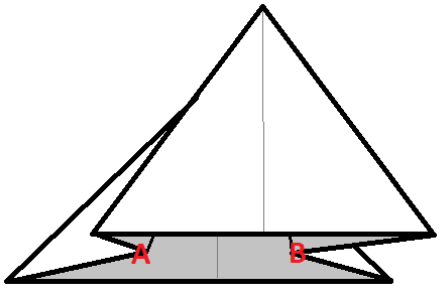
Make Your Own Origami Eagle LEM

1. Fold halfway and on diagonals to make creases.

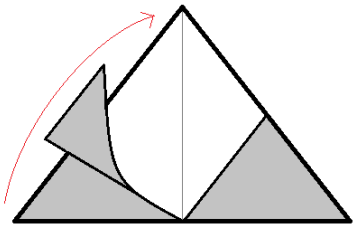


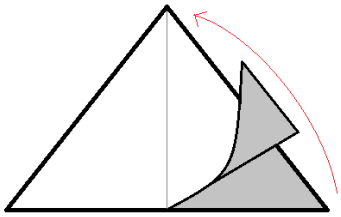
2. Fold in half and pinch corners A and B so that they meet.

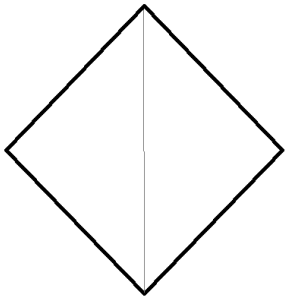




3. Fold bottom left and right corners up to meet at top of triangle. Flip over and repeat on other side.

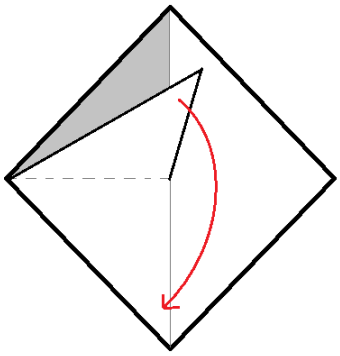


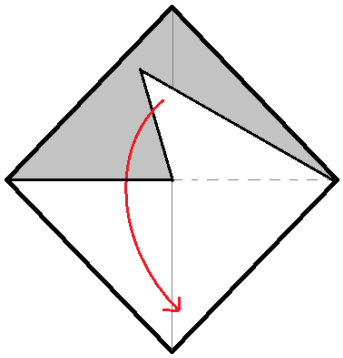




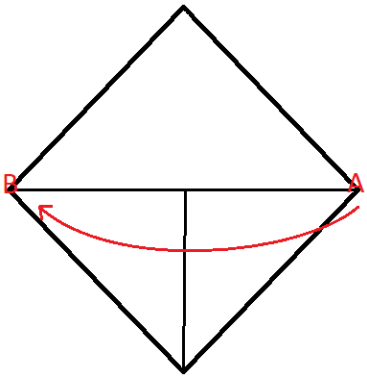
(Once both sides are folded up, it should create this diamond shape.)

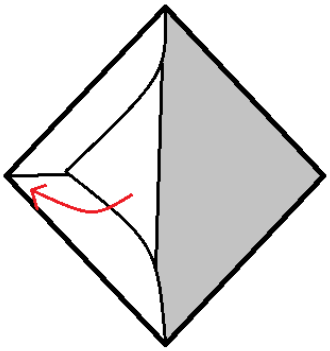
4. Fold top left and top right corners down to meet bottom point, pressing flap at half way point, flip over and repeat on other side



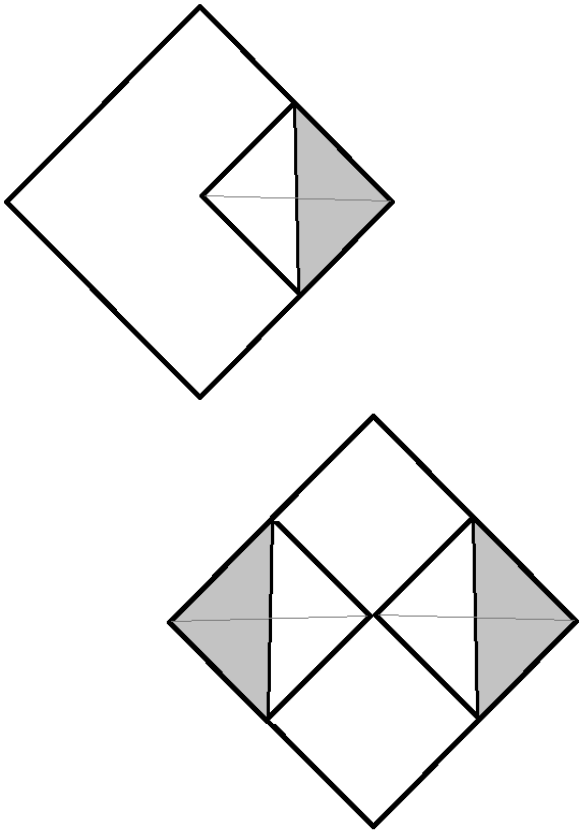


5. Connect corner A with B so that folded areas are sandwiched together, flip over and repeat on other side.

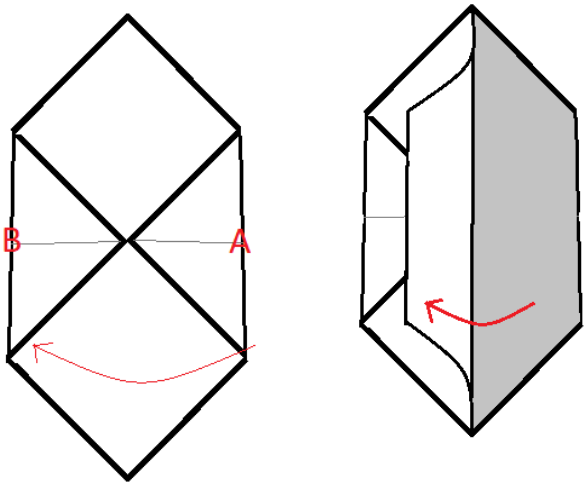




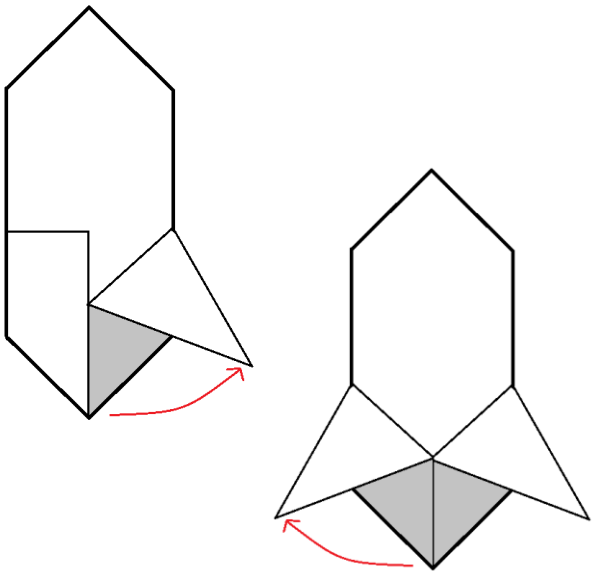
6. Fold outer right and outer left corners to meet at center line, flip and repeat on other side.



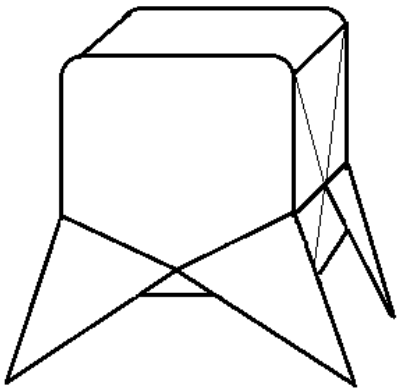
7. Connect edge A with B so that folded areas are sandwiched together, flip over and repeat on other side.



8. Pull bottom right and bottom left triangles out at slight angle and press, flip and repeat on other side.



9. Open slightly and blow through bottom to inflate and flatten the top.



Congratulations! You have just made your own Lunar Excursion Module (LEM)!

Don't forget to name your LEM and decorate it before its spaceflight.

Source: [Cammareri, Bruno]. (2016, February 7). *Origami LEM Excursion Model* [video file] retrieved from youtube.com/watch?v=1O9jvgf32is

The *Eagle* Lunar Excursion Module (LEM)

President John F. Kennedy challenged the nation to land a man on Earth's Moon before the end of the 1960s. Just eight years after his directive, on July 20, 1969, American astronauts took the first steps on the Moon. Accomplishing this milestone in human achievement required the best of scientists to develop technologies and equipment to safely land on a surface not known to anyone on Earth and would not have been possible without the Lunar Excursion Module (LEM).

Did You Know?

- The Lunar Excursion Module (LEM) was the lander spacecraft that was flown from lunar orbit to the Moon's surface and back to the orbiting command module during the US Apollo program.
- The landing gear had to be adaptable to whatever surface it encountered on the Moon. Since scientists did not have a clear idea of what the surface of the Moon was like in 1962, the engineers designed the landing gear-- with four legs and a dish-shaped pod—so it could land on many different surfaces.
- In addition to astronauts, the LEM carried a set of scientific experiments that were left on the Moon.
- *Eagle* was the name given to the Apollo 11 Lunar Excursion Module (LEM).
- At 4:17:40 pm on June 20th, 1969, the LEM settled onto the Moon's surface at the Sea of Tranquility, as Neil Armstrong uttered the now-famous words, "The *Eagle* has landed."
- The *Eagle* LEM did not return to Earth and it wasn't meant to. On July 21, 1969 it was jettisoned into lunar orbit from the Command Module. Scientists assume it crashed into the lunar surface a few months later.

How to Make Your Own *Eagle* LEM

- Follow the origami paper-folding instructions.
- Don't forget to name your LEM and decorate it with an US flag sticker.

Fun Fact: LM (Lunar Module) 1 and LM 2 were built for a first and second unmanned Earth-orbit test flight. When the test flight of LM 1, named Apollo 5, was so successful, the decision was made that a second mission was not needed. Instead LM 2 was used for ground testing ahead of the first successful Moon-landing mission. In the early 1970s the LM 2 was modified to appear like the Apollo 11 Lunar Excursion Module *Eagle*, and is on display in the National Air and Space Museum's *Lunar Exploration Vehicles* gallery.

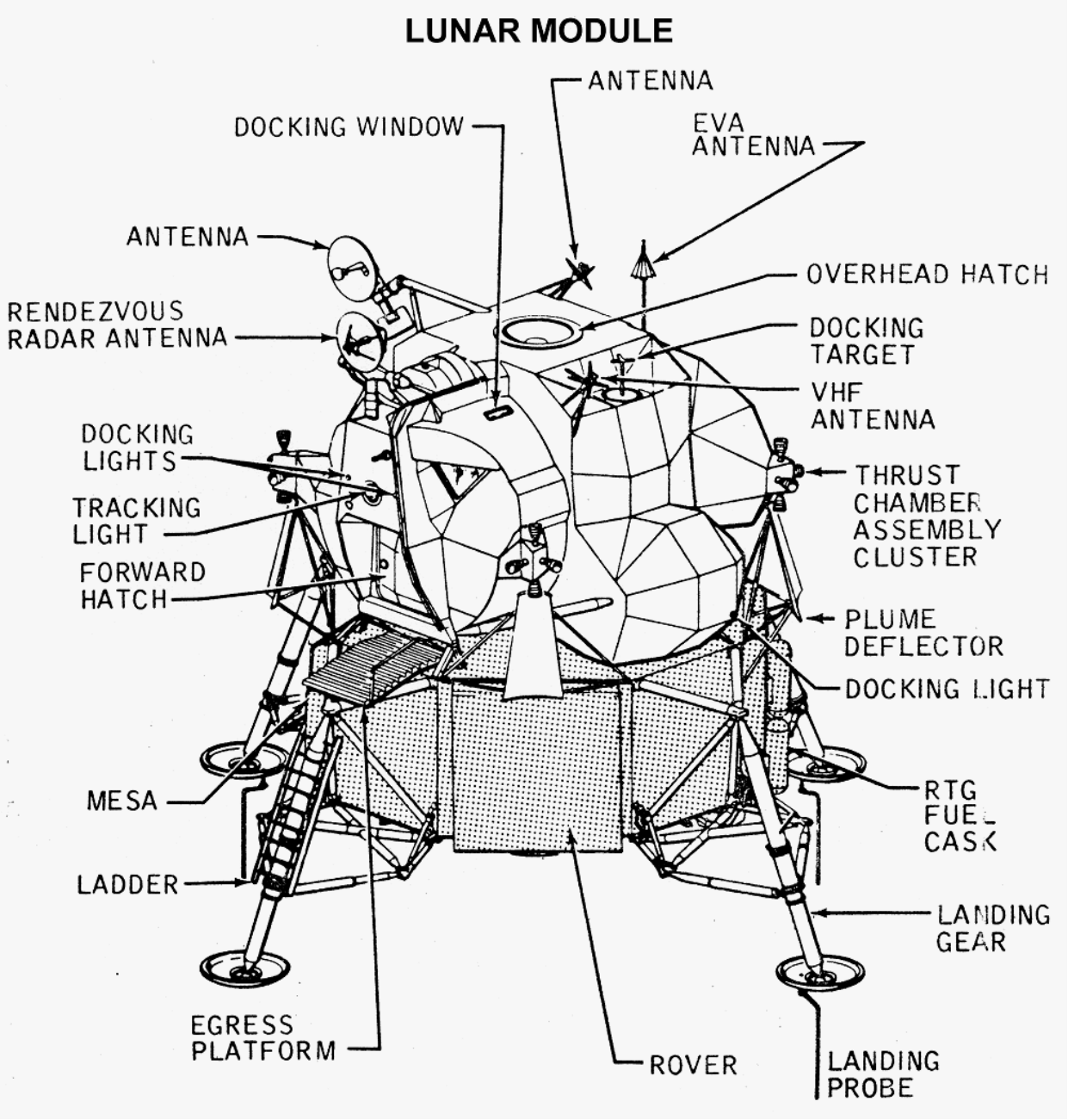


Image courtesy of NASA.