

Understanding Technical Elements

How is Technical Design Scored?

Most Destination Imagination Challenges have some kind of ‘device’ that has to be built that may or may not have to ‘do something’. What kind of device and how much it has to do, and how important it is within the Challenge requirements change year by year and challenge by challenge

If the challenge has a scoring element called ‘Technical Design’, this is what will be considered by Appraisers when they score that element:

- **Functional:** It does what it’s supposed to do. What is it supposed to do? What does the Challenge say? Is it supposed to move? Make a sound? Change its appearance? Does it do that?
- **Effective:** It starts and works every time in a way that is adequate to accomplish what it needs to accomplish to produce the intended or expected result.
- **Efficient:** There is very little wasted effort – everything is there for a reason. This does not mean that the device has to be simple or direct – but within the design almost every part has a purpose. It can be a 20 part Rube Goldberg device, but if one piece is removed, it no longer works or it no longer works as well or as effectively.
- **Reliable:** It works over and over again – so, if the team cannot get the device to work during the Presentation but it works later, the lack of reliability has to be taken into consideration when scoring for Technical Design.

The ‘Device’ for 2020’s First Encounter is the Habitat Morph. A Habitat Morph “is any visible and/or audible change in the Habitat.” [D.1, p5]. The team must “use Technical Methods to initiate, operate, and/or produce the Habitat Morph.” [D.3, p5] How the Habitat Morph operates is up to the team.

Scoring Technical Innovation

Technical Innovation is defined as a new, unique, original or creative manner in which to carry out or accomplish a task using technical methods. A device that is both well designed and innovative is something to aim for. However, an innovative device does not have to be well designed and vice versa. Each area is considered separately.

Remember, both design and innovation relate to how the device *works*.

Wording in the Central Challenge for 2020: “Your team will earn points for Technical Design and Technical Innovation based on all methods used or attempted during the Presentation to initiate, operate, and/or produce the Habitat Morph.” [D.5, p5] This is important because in years past, Appraisers were told to confine their scoring to the technical methods that actually happened during the 8 minutes, and to ignore methods that were attempted but didn’t work.