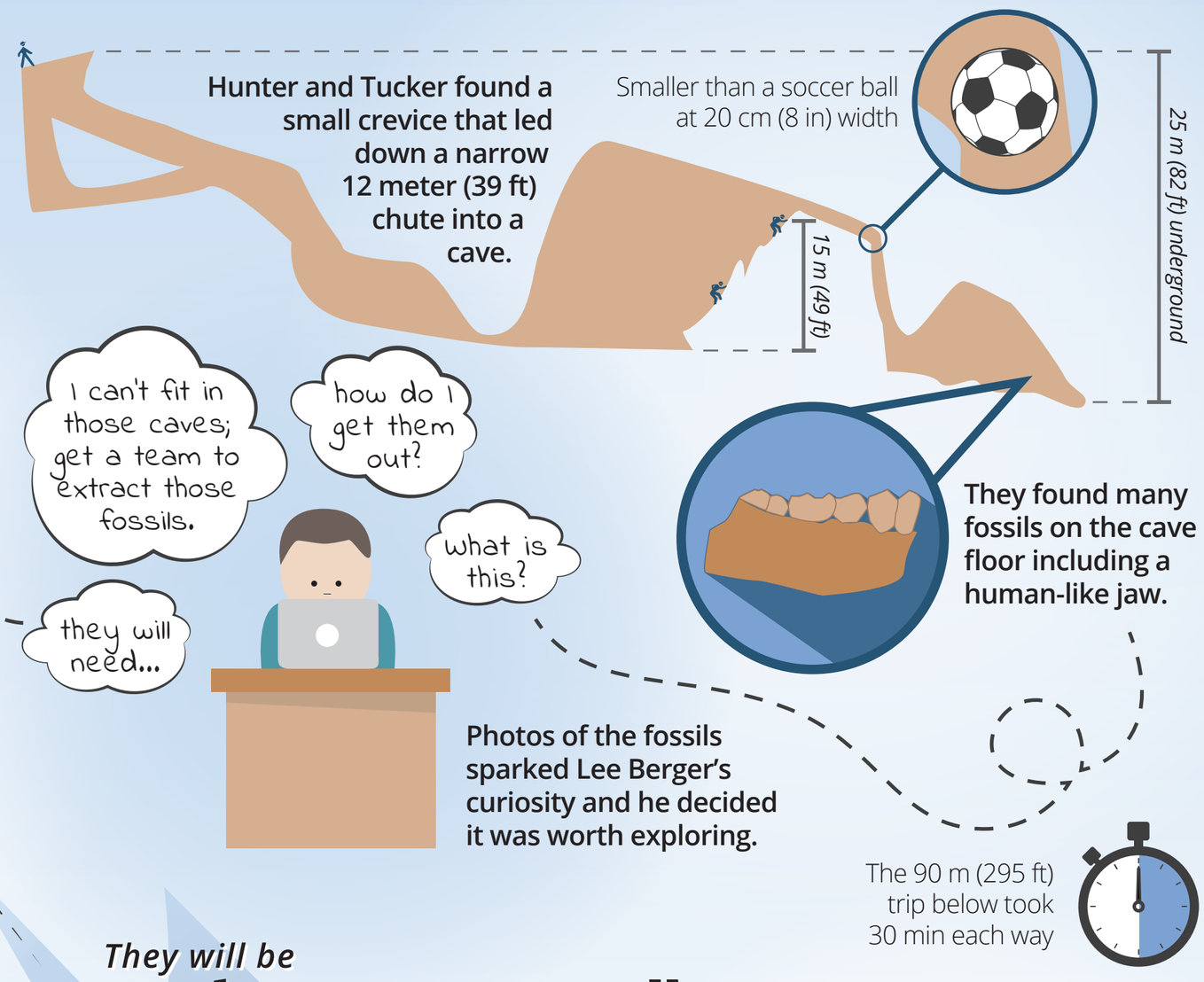
Discovering *Homo naledi*

Paleoanthropologist Lee Berger recruited geologist Pedro Boshoff to find fossils in well-explored, South African caves. When recreational cavers Rick Hunter and Steven Tucker joined the team and entered the Rising Star cave system, it sparked a new kind of collaborative scientific exploration.



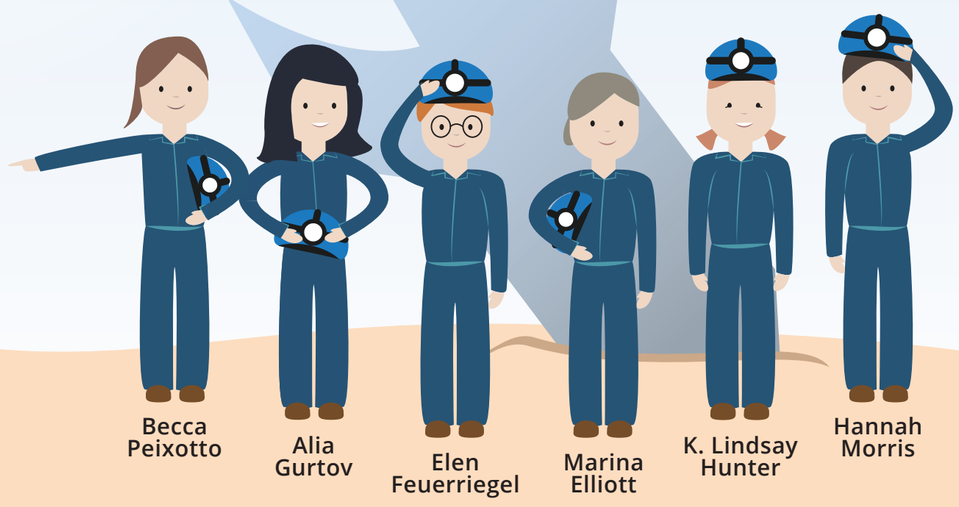


They will be

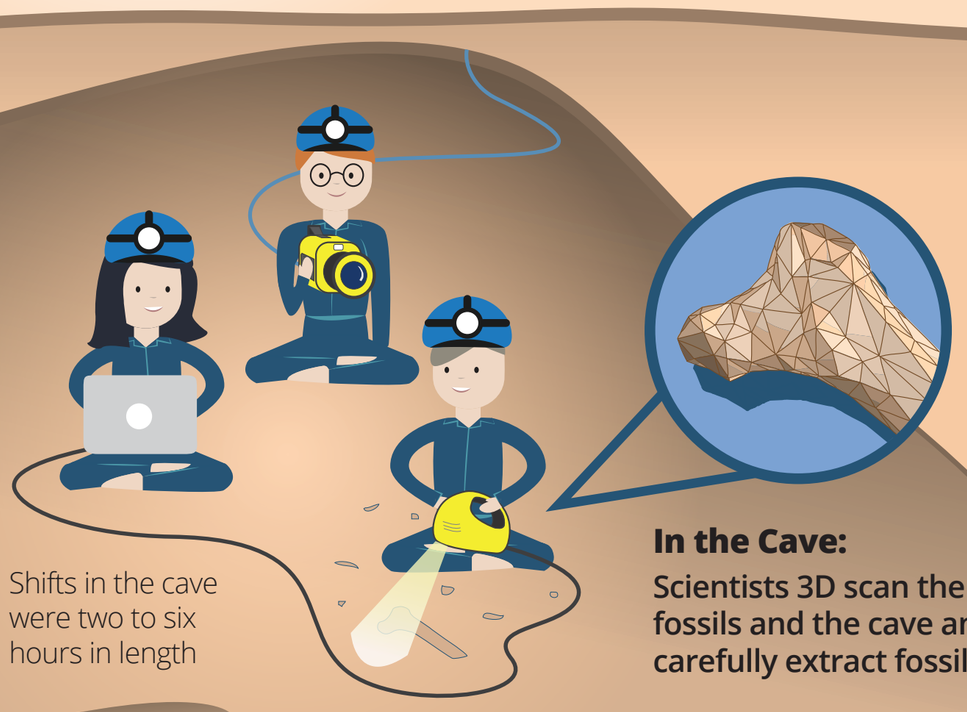
"Underground Astronauts"



Above Ground:
Scientists watch excavations and study extracted fossils.



> *"...THE most qualified human beings on the planet to do this very dangerous, very remarkable job."*
>
> ***— Prof. Lee Berger***



Shifts in the cave were two to six hours in length

In the Cave:
Scientists 3D scan the fossils and the cave and carefully extract fossils.

4 weeks in the cave

1550 hominin fossils were recovered

61 scientists involved

2 years of description

1 **new hominin species**

Discoveries

What was actually observed

- Small skull
- Curved fingers and long thumbs
- Long, muscular legs and human-like feet
- No tooth, tool, or burn marks on bones
- Bones don't match any described species





Hypotheses

What scientists think it means

- 15+ individual bodies in the cave
- Height: 145 cm (4.8 ft) Weight: 48 kg (106 lb)
- Good climbers
- Used primitive tools
- Walked up-right
- Placed in the cave after death
- This is a new species of hominin

Like all scientific exploration, this discovery leaves us with more questions than answers.

But, *unlike all science*, this study was made open so anyone, anywhere can read the reports, 3D print the fossils and make their own conclusions.

Join the conversation:
#homonaledi

Berger LR, Hawks J, de Ruiter DJ, Churchill SE, Schmid P, Delezene LK, et al. *Homo naledi*, a new species of the genus Homo from the Dinaledi Chamber, South Africa. **Elife. 2015;4: 1–35. doi:10.7554/eLife.09560**

Team Field Blog: *http://voices.nationalgeographic.com/blog/rising-star-expedition/*

Dirks PH, Berger LR, Roberts EM, Kramers JD, Hawks J, Randolph-Quinney PS, et al. Geological and taphonomic context for the new hominin species *Homo naledi* from the Dinaledi Chamber, South Africa. **Elife. 2015;4: 1–37. doi:10.7554/eLife.09561**

unboxSCIENCE