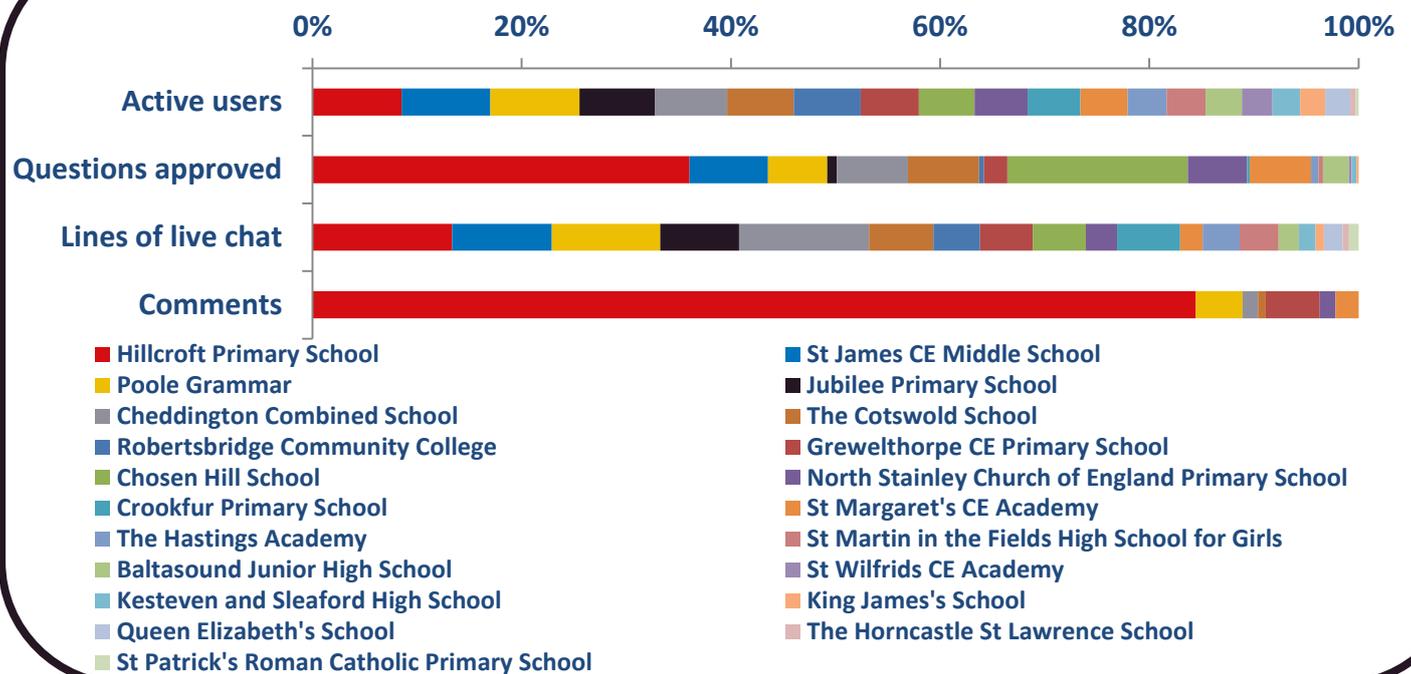


March 2016

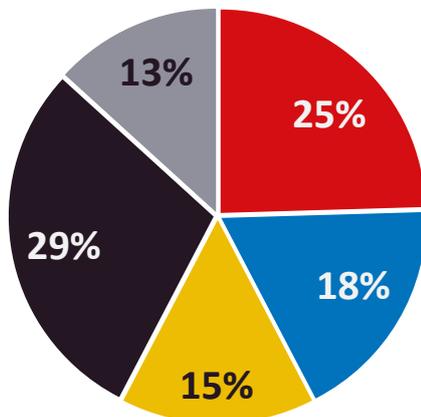
The Orbit Zone was the third round of *I'm an Astronaut* funded by the UK Space Agency's Principia grant scheme and took place at the halfway point of Tim Peake's mission on the International Space Station. The students in the Orbit Zone interacted with the Astro Support Team: people whose jobs related to human space missions like Principia. The Team consisted of an astronaut instructor, an astrobiologist with an experiment on board the ISS, an ESA research doctor based in Antarctica, a robotics engineer whose experiment Tim has been doing and a team of ISS flight controllers, Col Ops. Discussions in the zone covered a wide range of topics related to space with a specific focus on humans living on the ISS and the work of the Astro Support Team members. There was a particularly high number of comments from students on ASK questions.

School data at a glance

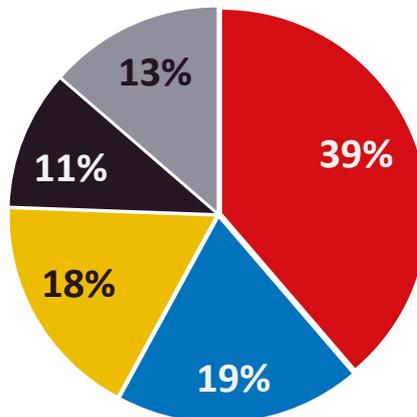


Team activity

Answers



Live Chat



Astro Team Member	Profile views	Position
Jenn Wadsworth	868	Winner
Elie Allouis	490	2nd
Floris Van Den Berg	530	3rd
Richard Moss	544	4th
Col Ops	471	5th

Key figures from the Orbit Zone in comparison to other zones

Page views	Orbit Zone	IAA Average	IAS Mar Average
Total	23,483	30,462	25,973
ASK	2,359	2,499	1,881
CHAT	2,591	3,180	3,193
VOTE	1,786	1,767	1,761

	ORBIT ZONE	IAA AVERAGE	IAS 2012-15 AVERAGE
Schools	21	22	9
Students logged in	438	498	353
% of students active in ASK, CHAT or VOTE	86%	85%	85%
Questions asked	1,178	1,117	717
Questions approved	441	392	307
Answers given	538	592	552
Comments	146	124	78
Votes	289	380	281
Lines of live chat	6,360	8,058	4,827
Live chats	20	21	14
Average lines of live chat	318	388	322

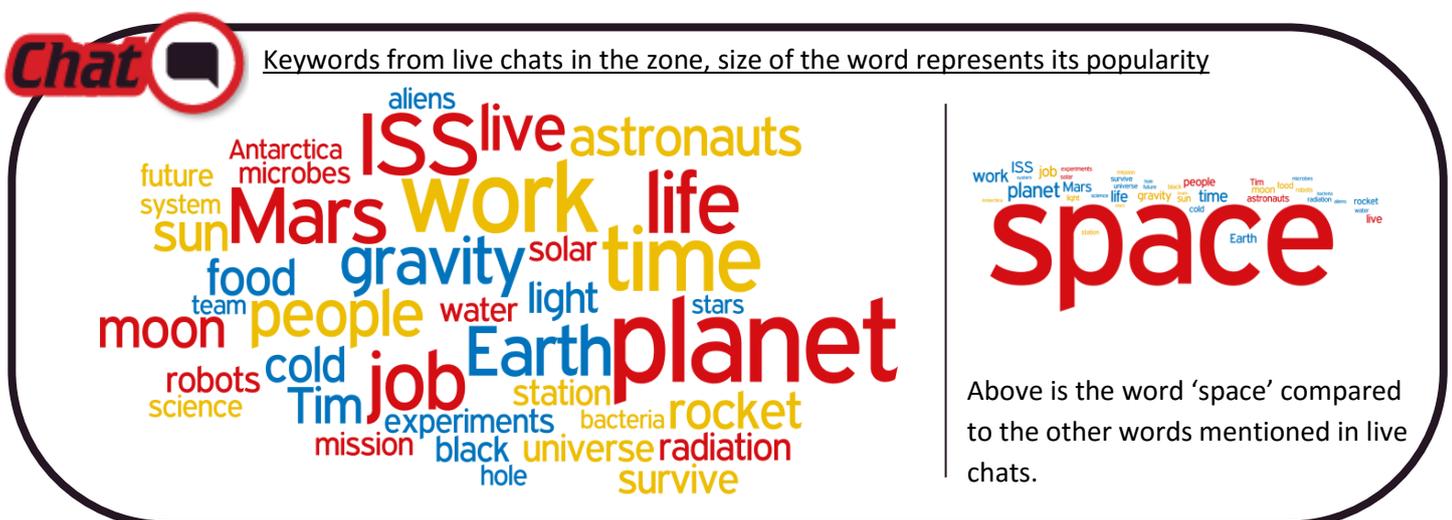
Popular topics

The students were interested in both the work of the Astro Support Team members and what they could explain about life in space. The varied backgrounds of the Team meant that a wide range of space-related topics were covered.

For example, Floris got to talk about doing research in Antarctica as well as the effect of space on the body and Jenn was asked about her lab in Edinburgh as well as her experiment on the ISS and the potential for life surviving in space. Richard and Col Ops were asked about Tim Peake as well as specifics about life on the ISS, such as what happens when things go wrong. Elie was often asked about robots in space and the engineering of rockets.

Other popular topics were the history of the ISS, the future of space travel, such as long distance missions and the preparation of food in microgravity, possibly due to a recent TV programme featuring Tim Peake preparing recipes by Heston Blumenthal. The students asked the Team for their opinions on controversial topics in space science such as Mars One and weapons technology.

On a personal level, there were questions to the Team members about their career paths, personal achievements and their likes and dislikes such as films, food and even their opinions of each other. General space physics questions on topics like black holes, gravity, the solar system and parallel universes were also present.

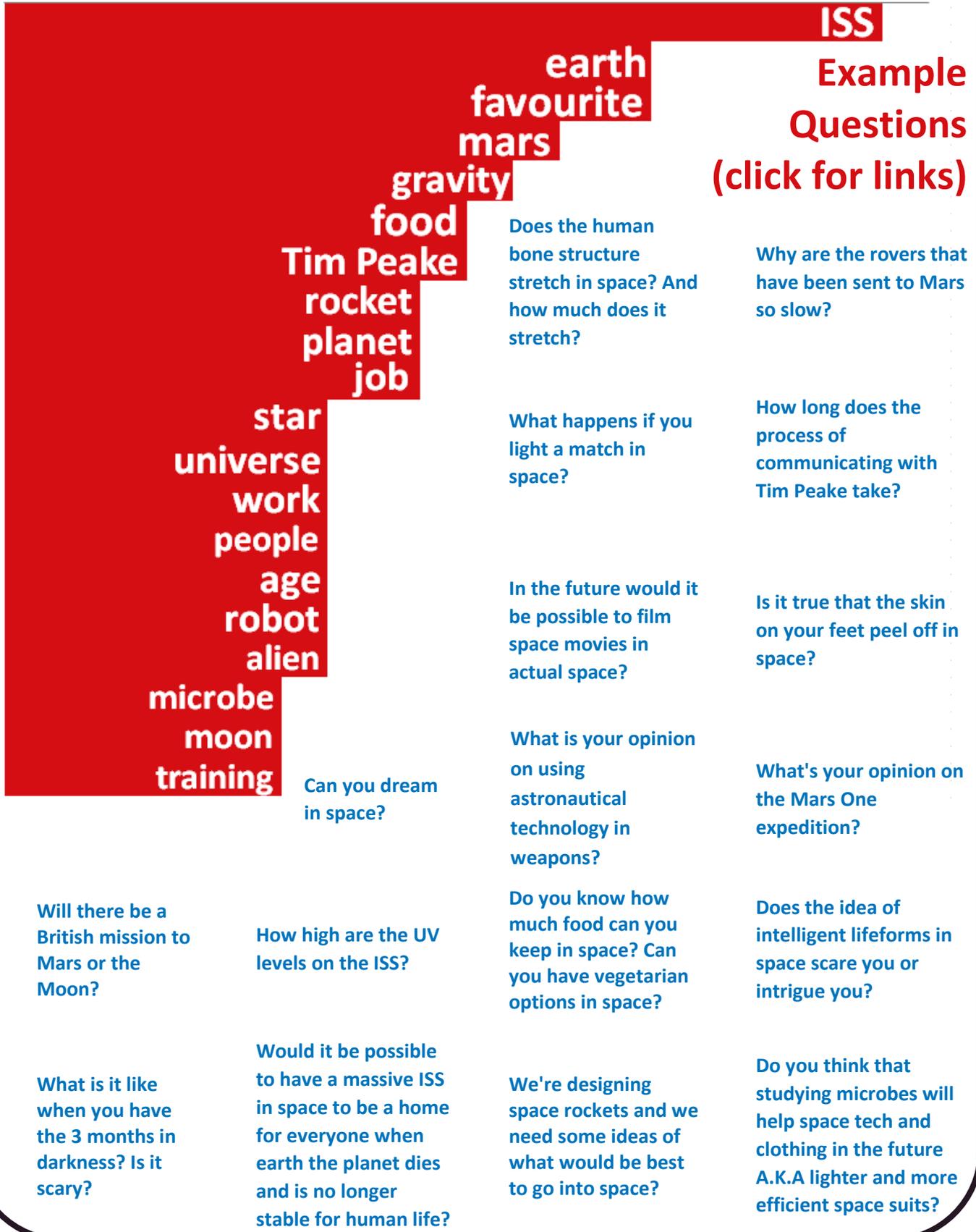


Above is the word 'space' compared to the other words mentioned in live chats.



Keywords of questions approved in the zone, length of bar represents frequency of use

0 2 4 6 8 10 12 14 16 18 20



Example Questions (click for links)

Will there be a British mission to Mars or the Moon?

What is it like when you have the 3 months in darkness? Is it scary?

How high are the UV levels on the ISS?

Would it be possible to have a massive ISS in space to be a home for everyone when earth the planet dies and is no longer stable for human life?

Can you dream in space?

Does the human bone structure stretch in space? And how much does it stretch?

What happens if you light a match in space?

In the future would it be possible to film space movies in actual space?

What is your opinion on using astronomical technology in weapons?

Do you know how much food can you keep in space? Can you have vegetarian options in space?

We're designing space rockets and we need some ideas of what would be best to go into space?

Why are the rovers that have been sent to Mars so slow?

How long does the process of communicating with Tim Peake take?

Is it true that the skin on your feet peel off in space?

What's your opinion on the Mars One expedition?

Does the idea of intelligent lifeforms in space scare you or intrigue you?

Do you think that studying microbes will help space tech and clothing in the future A.K.A lighter and more efficient space suits?

Examples of good engagement

Throughout the two weeks some students were very active in the comments in ASK, responding to answers and showing they appreciated answers or wanted more information:

Louis, student: *Would it be possible to live on mars with oxygen, food and water?*

Richard, astronaut trainer: *Yes. The other key element is radiation. You need to be protected from that too. We aim to put people on Mars as soon as possible...*

Ella, student: *I think it is really cool how people go up into space. But wouldn't it be cool seeing a British astronaut go up into space!! Awesome question by the way!!*

Hanna, student: *What would you do if you were in the same situation as they guy from the Martian?*

Jenn, astrobiologist: *I'd definitely be listening to disco music too 😊*

Elie, engineer: *Establish what you have, think about what you need and how to get there...! It was quite well put together in the movie, like the growing of vegetable, scavenging different bits together and finding a way to communicate with Earth...and it is applicable to everything you do...*

Student: *Good question Hanna!!! I would probably have a panic attack i am such a drama queen!!!*

Astro Support Team winner: Jenn Wadsworth

Jenn's plans for the prize money: *"I'd take pupils from selected schools to the Boulby mine and show them around the Astrophysics and Astrobiology labs situated there. Depending on circumstances, I'd organise a visit to the 1.1km deep Labs at Boulby. If a visit isn't possible, I'd establish a 'remote' engagement activity, possibly involving instruments from the European Space Agency's ExoMars rover!"* Read Jenn's [thank you message](#).



Student Winner: Soyuz Guru, St James CE Middle School

For great engagement during the event, this student will receive a certificate and will be part of the live chat with Tim Peake when he returns to Earth in the summer.

School Winner: Hillcroft Primary School

Hillcroft Primary School were nominated by the members of the Astro Support Team to be part of the live chat with Tim Peake.

Feedback We're still collecting feedback from teachers, students and the Astro Support Team but here are a few of the comments made during the event...

"Thank you to everyone involved with Chosen Hill's chat today - you are all awesome! The students are buzzing." – Teacher

"It was really interesting thank you again I will remember this experience forever!" – Student

"I think your enterprise made a difference! I am sure Tim Peake genuinely appreciates this kind of support!" – Richard, astronaut instructor

"I was very refreshed to see just how enthusiastic young people are about all things space and to also get their perspective on things" – Jenn, astrobiologist