



# Qobo series course

Section 2 Illuminant Fixed Star

# Curriculum objectives

#### Knowledge and skill

1.Learn to use left-turning card and right-turning card, know their function;

2.Understand characters of fixed star shining, know Polaris;

#### **Process and method**

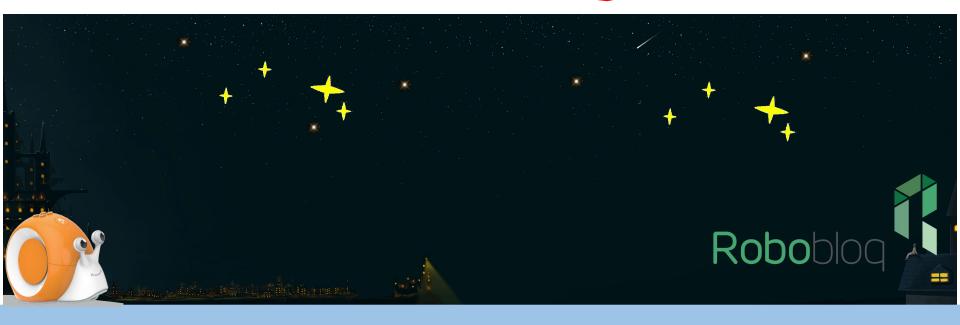
1.Exercise children's observing ability by observing picture of fixed star; 2.Stimulate children's desire of exploration and leaning by starting with the remote fixed star;

#### **Emotional attitude and values**

1.Extend children's cognition and increase astronomy knowledge by leaning universe knowledge.



In the night of earth, we can see stars which twinkle in the sky, these dazzling stars are the fixed stars in the universe. Fixed star is the star which blazing, the fixed stars that we can see in earth are all in the Milky Way galaxy.



There are giant nebulas that gathered by gas and dust in universe, nebulas have different color, such as red, green and so on ,fixed star born in these nebulas, and fixed star begin expand continuously at borning, so their cubage and mass is very big.



Fixed star is the luminary of universe, starlight is weak because fixed star is far from earth, and sun is the nearest fixed star in terms of distance.

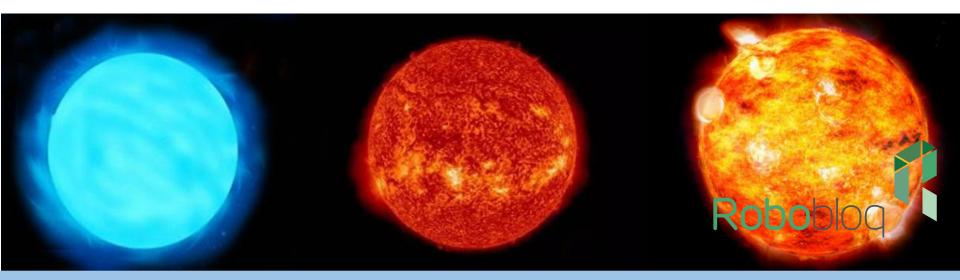
Actually, fixed star also operate continuously in high speed, for example, sun operate revolving round the center of Milky Way galaxy. But we cannot observe other fixed stars' movement because they are very far from us.





Fixed star mainly consists of gas, but they have so strong power that they can shining by themselves, there are thousands upon thousands fixed star, and different fixed stars have different temperature and different color.

Red fixed star is hot, yellow fixed star is very hot, blue fixed star is extremely hot.



In fixed stars, in addition to sun that we know, there are also Altair, Vega, Polaris, they all belong to fixed stars.

Polaris is the steady fixed star that we can see in luminance and location in the sky. It is a important indicator in outdoor activity and ancient navigation because it is situated in due north of earth.





## Card explanation

#### **Right-turning card:**

When Qobo is on this card, it will turn right and advances forward one step.

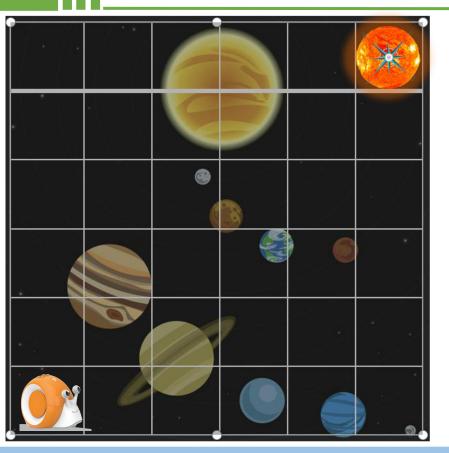


#### Left-turning card:

Jurn L

When Qobo is on this card, it will turn left and advances forward one step.

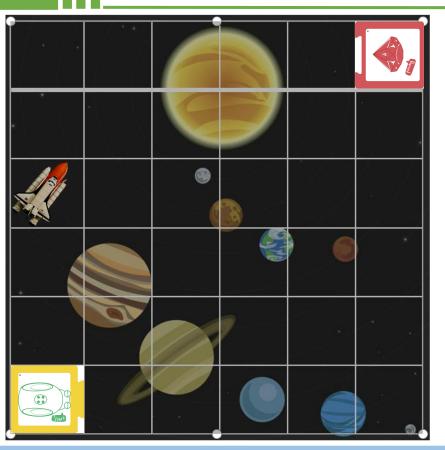
### Hands and brains



There are numerous fixed stars in universe, especially Polaris of north in sky attract Qobo, so Qobo decided to fly to Polaris, and explore the arcanum of Polaris.



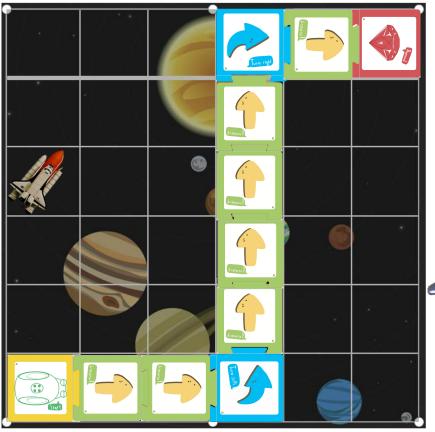
## Hands and brains



Try to build a shortcut route that fly to Polaris by using forward card , left-turning card and rightturning card that we have learned about. Helping Qobo builds a propeller that can turn round with Lego blocks.



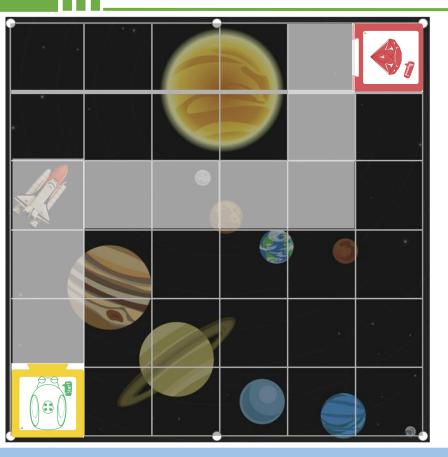
## Hands and brains



Do you find new things during Qobo's route? Finally, does Qobo find Polaris successfully? How does Qobo walk?



## Task challenge

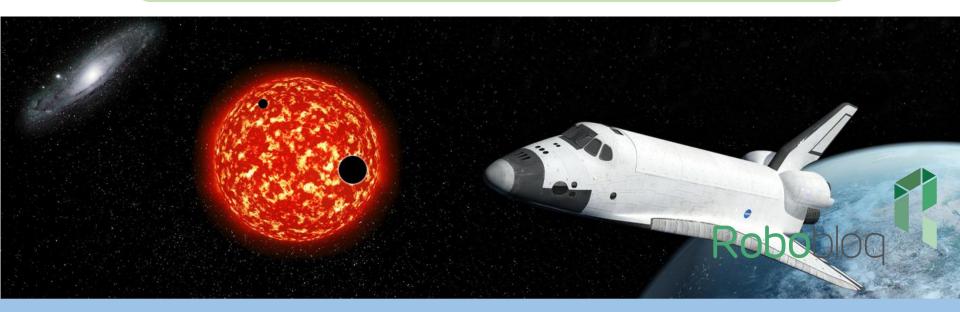


In universe, there exists gravity in all planets. In order to fly fixed star safely in space, we need to bypasses big planet. Children, build one new route with your hands.



## After-class sharing

What characters does fixed star have? Why sun also is fixed star? The left-turning card and right-turning card that we learned about make Qobo move in what way?



# Copyright information

The copyright of this material belongs to our company.Unauthorized dissemination or plagiarism will be investigated and legal responsibility will be affixed. The company has the final right of interpretation.

Company: Robobloq Co., Ltd Address: Room 208, Building B53, Zhongchuang IndustrialPark, Liuxian Avenue, Taoyuan Street, Nanshan District of Shenzhen E-mail: hello@robobloq.com Telephone: + 86-0755 -26926929 Website: http://www.robobloq.com

