



Creative Ability can be Learned

Gigo Learning Lab's complete series includes 20 individual packages, as well as five school sets. The special features of Gigo's Learning Lab are as follows:

1. Using GIGO's "building block" construction-based curriculum, every class has a ready-to-assemble model, and includes time designed to promote individual creativity.
2. Promotes thinking outside-the-box of the traditional educational framework by learning innovation through play!
3. We are all innately good at something, so we should take into account both individual development and the ability to work as part of a team effort.
4. Course levels are designed from elementary to difficult, combining a life sciences-based curriculum with applications from daily life.
5. Experiment using Gigo's "building blocks", which can be used over and over again, saving both time and effort.
6. Comes with Gigo's newly developed 3D Smart Manual, which makes learning how to intelligently assemble each model easier than ever before.
7. Learning Lab's Cloud Platform allows systematic recording of learning progress.

We hope that kids can enthusiastically learn scientific knowledge through fun hands-on experience, developing their problem-solving abilities, as well as a positive attitude towards science. Our mission is to help children apply their newfound knowledge to daily life, furthering their innovational skills and abilities.

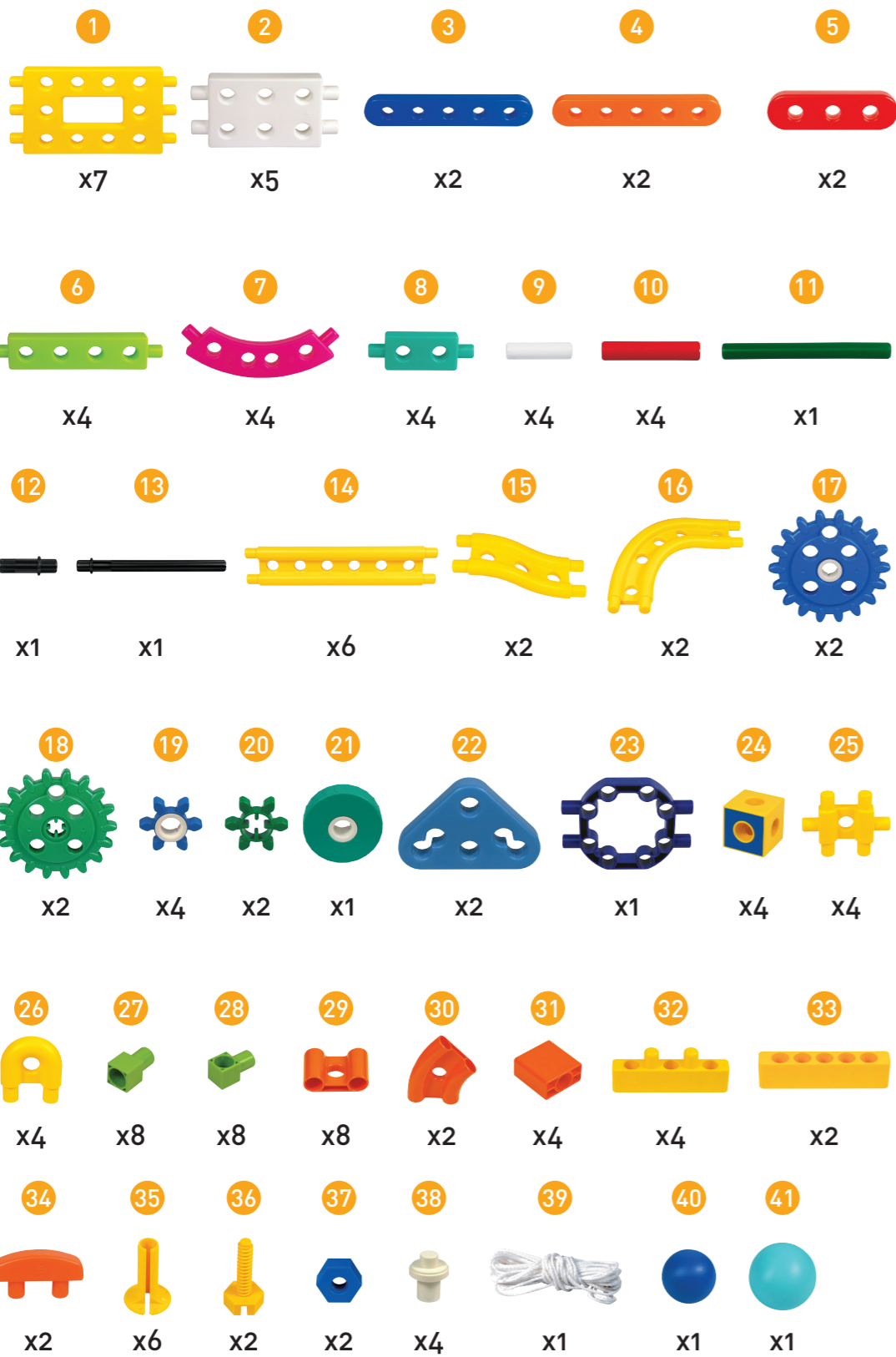
For any questions or inquires. please email to LL@mail.gigo.com.tw



Index (v1.0)

Preface	01	19. Trap Track	41
Index	02	20. Creativity Contest- Ball Track	43
Parts List	03	21. Aim & Hit	45
01. Hurdling	05	22. Meteorite Impact	47
02. Skiing	07	23. Zumanjaro	49
03. Hockey	09	24. Elevator	51
04. Baseball	11	25. Creativity Contest- Cable Car	53
05. Creativity Contest- Basketball	13	26. Carousel Float	55
06. Fishing Rod	15	27. Four-blade Watermill	58
07. Roller Skate	17	28. Dutch Windmill	61
08. Windmill	19	29. Lottery Machine	64
09. Waterwheel	21	30. Creativity Contest- Ferris Wheel	67
10. Creativity Contest- Propeller	23	Appendix: Learning Lab Packages	69
11. Balance Beam	25		
12. Seesaw	27		
13. Trebuchet	29		
14. Pirate Ship	31		
15. Creativity Contest- Rocking Horse	33		
16. Moving Straight	35		
17. Track Curve	37		
18. Tunnel	39		





Parts List

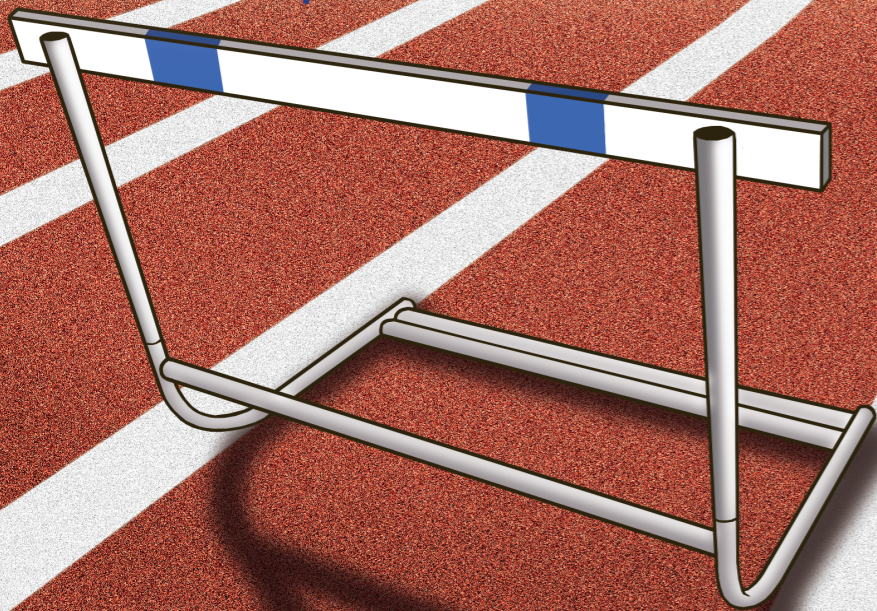
- | | | | |
|----|---------------------------|----|------------------------|
| 1 | 10-hole Block | 30 | Curved Track Connector |
| 2 | 6-hole Block | 31 | Rod Connector |
| 3 | 5-hole Rod (Blue) | 32 | Flat Rod with Pegs |
| 4 | 5-hole Rod (Orange) | 33 | Flat Rod |
| 5 | 3-hole Rod | 34 | Arch with Pegs |
| 6 | 4-hole Rod | 35 | Nail |
| 7 | 4-hole Bended Rod | 36 | Screw |
| 8 | 2-hole Rod | 37 | Nut |
| 9 | Round Bar 6CM | 38 | Track Fixer |
| 10 | Round Bar 8CM | 39 | Cord 200CM |
| 11 | Round Bar 16CM | 40 | Ball 4CM |
| 12 | S Cross Axle | 41 | Ball 5CM |
| 13 | L Cross Axle | | |
| 14 | Straight Track | | |
| 15 | Slide Track | | |
| 16 | Curved Track | | |
| 17 | 18T Rotation Gear | | |
| 18 | 18T Drive Gear | | |
| 19 | 6T Rotation Gear | | |
| 20 | 6T Drive Gear | | |
| 21 | L Wheel | | |
| 22 | Triangle Block | | |
| 23 | Ring Connector | | |
| 24 | L Cube | | |
| 25 | Multi Direction Connector | | |
| 26 | Track End | | |
| 27 | Vertical Adaptor | | |
| 28 | Lateral Adaptor | | |
| 29 | Track Connector | | |

Session 01

Hurdling

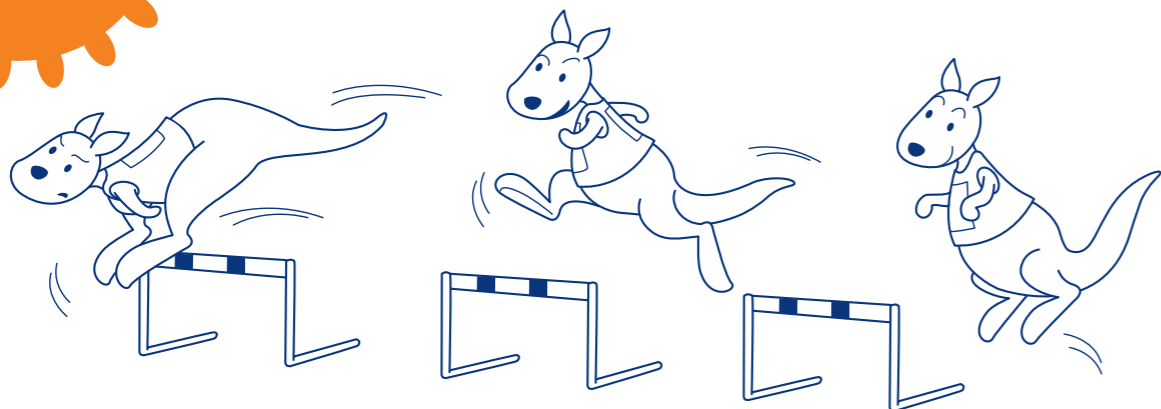
Learning Subject
Hurdling,
Olympics, Ranking

Hurdling is a track event wherein an athlete runs and jumps over a series of hurdles. It is one of the sports events in the Olympics.



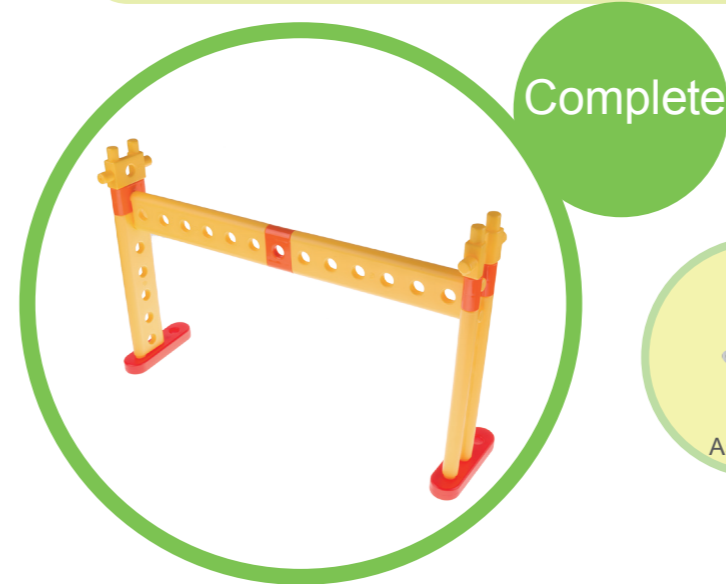
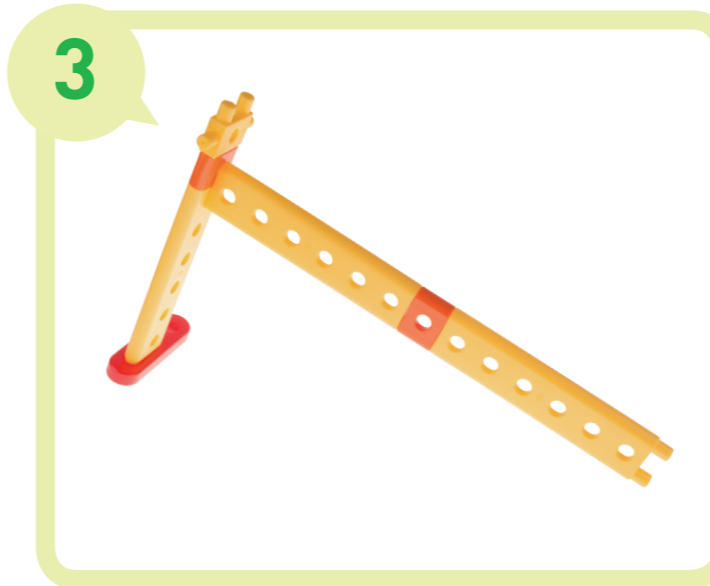
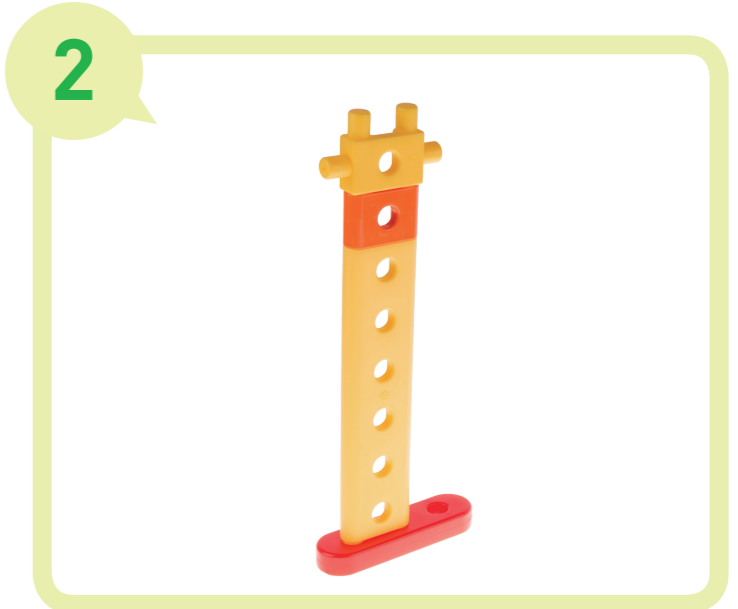
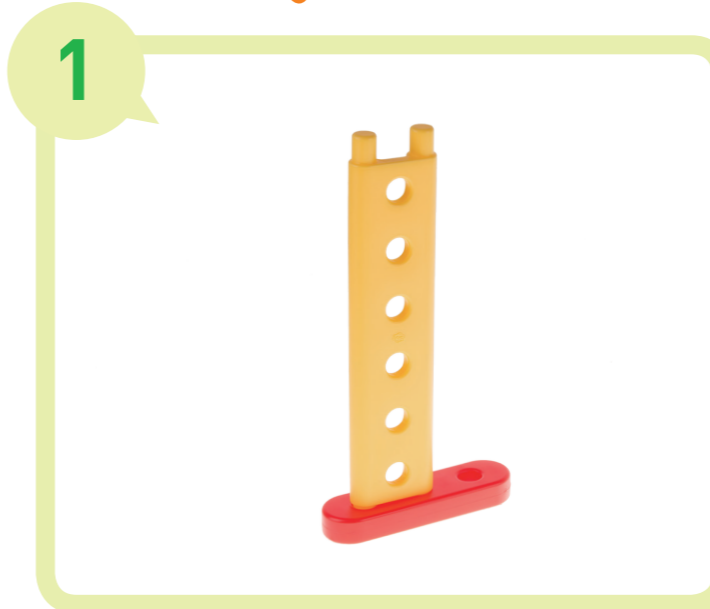
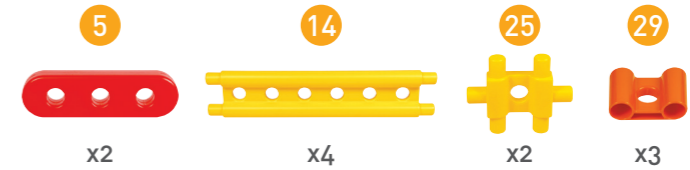
Activity

A little kangaroo hurdles. Please make its movement in chronological order.



Assembly Steps

Parts List



Evaluation

Session 02

Skiing

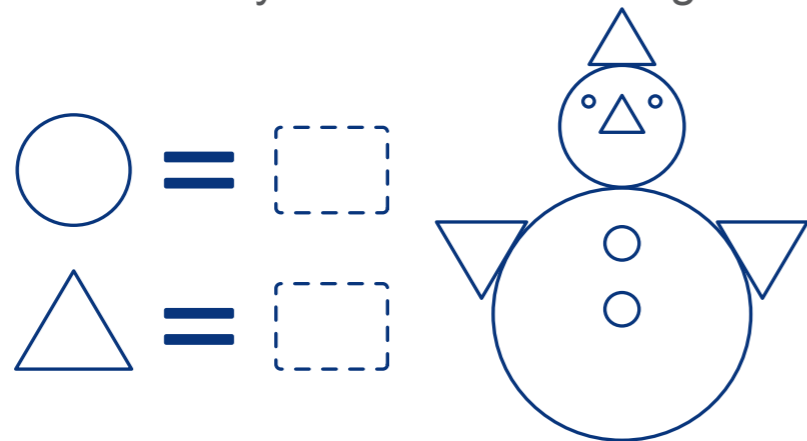
Learning Subject
Ski(s), Shapes,
Counting

Skiing on snow is an exciting sport!



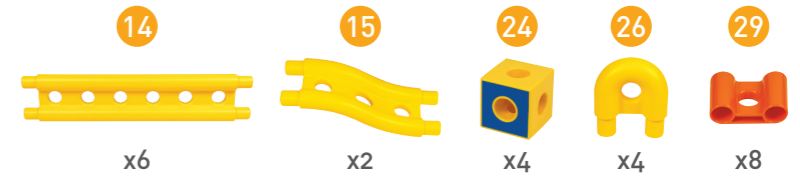
Activity

Please color the circles on the snowman blue, the triangles red and then count how many circles and triangles there are.



Assembly Steps

Parts List

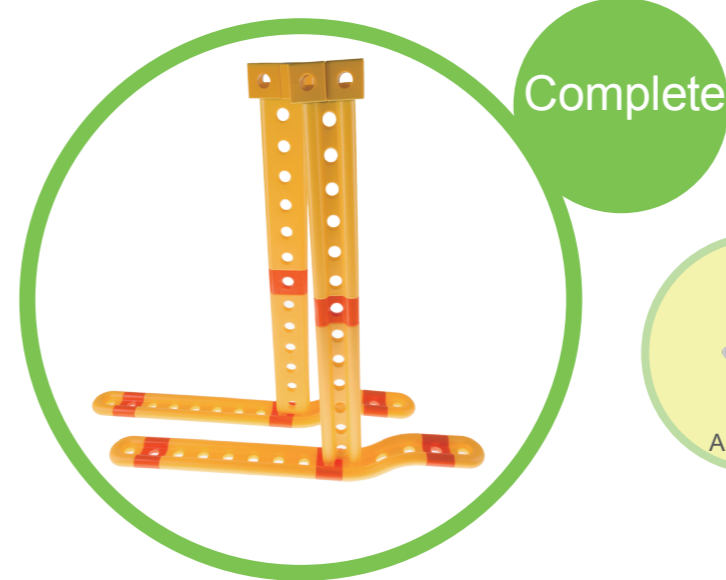


1

2

3

4



Complete

1

Model Assembly

2

Activity

3

Sharing

Evaluation

Session 03 Hockey

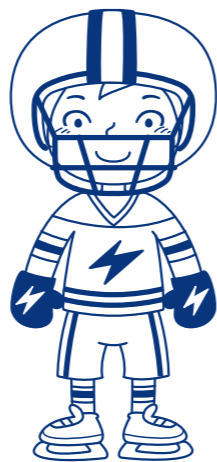
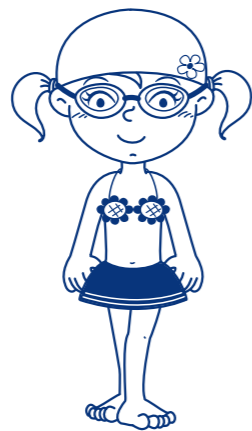
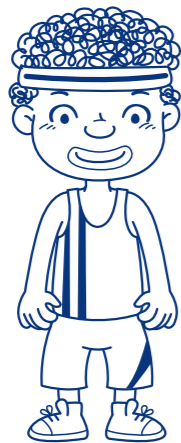
Learning Subject
Sportswear,
Judgment

Hockey is a kind of sport in which a player aims at the goal by controlling the puck with a hockey stick.



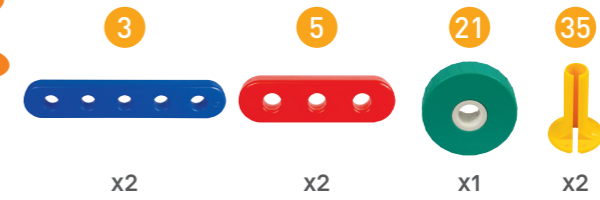
Activity

Can you find the player who's wearing hockey gear?



Assembly Steps

Parts List



1

2

3

4

Complete

1

Model
Assembly

2

Activity

3

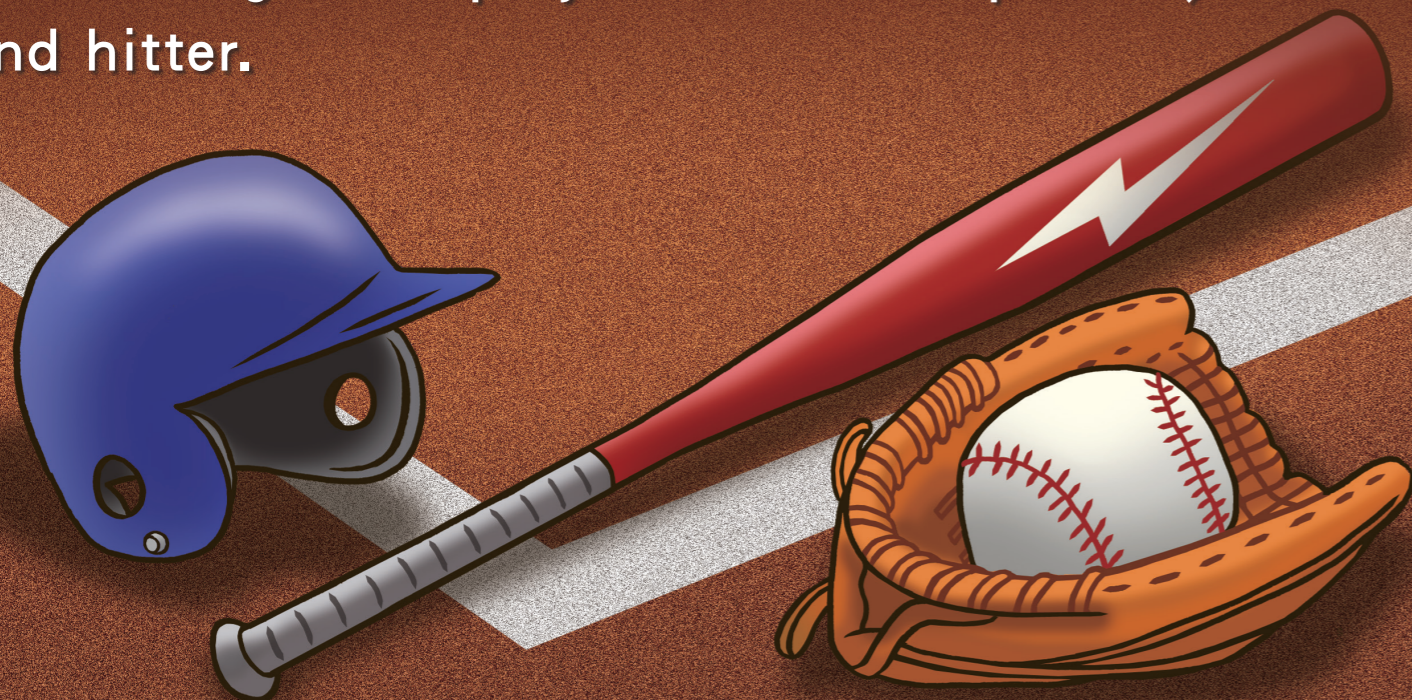
Sharing

Evaluation

Session 04 Baseball

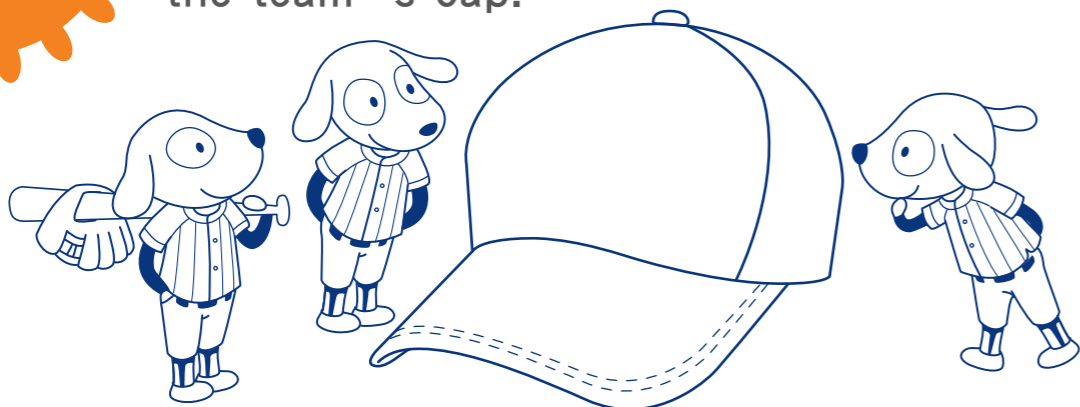
Learning Subject
Baseball games,
Aesthetic design

Baseball is a kind of sport that combines pitching and hitting. The players include a pitcher, catcher and hitter.



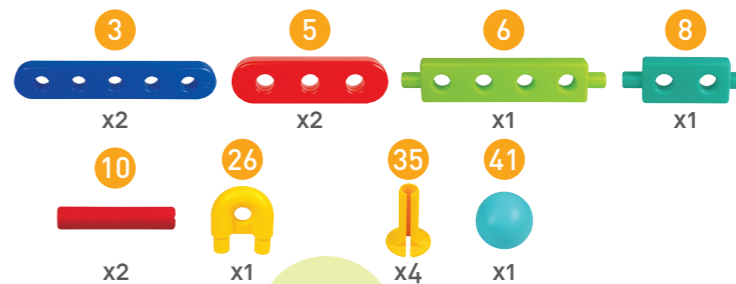
Activity

This is the exclusive baseball cap of the Dog Team. Please help design a logo for the team's cap.



Assembly Steps

Parts List

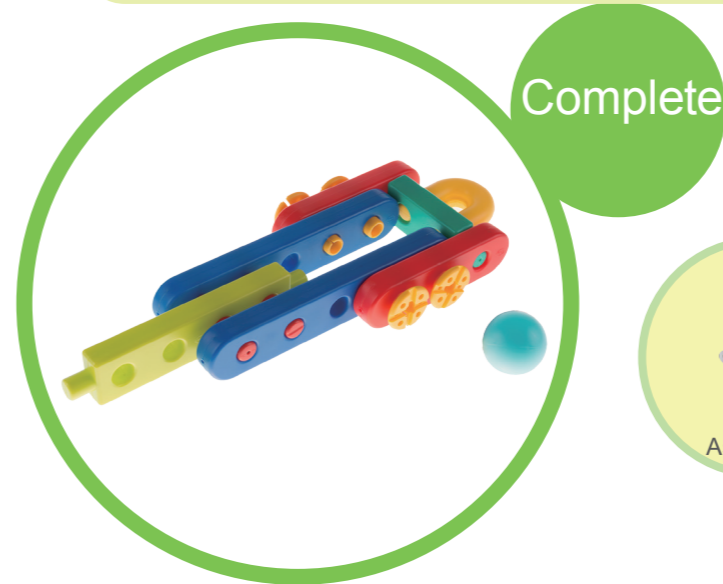


1

2

3

4



Complete

1

Model
Assembly

2

Activity

3

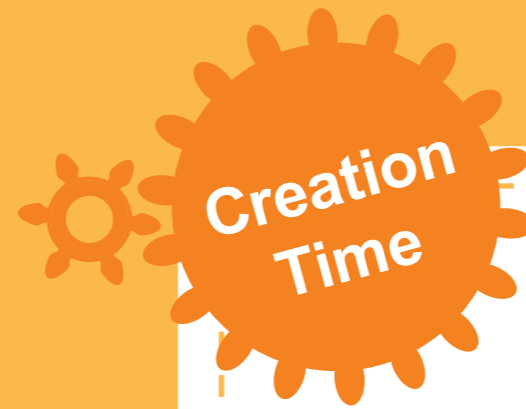
Sharing

Evaluation

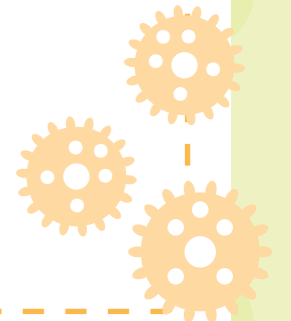
Session 05

Creation Contest - Basketball

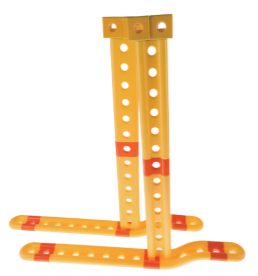
There are five players from each competing team In a basketball game. A score is made only when the ball is thrown into the basket.




A basketball game is really fun. Kids, make your own basketball and basketball hoop stand for an exciting basketball game!




02. Skiing



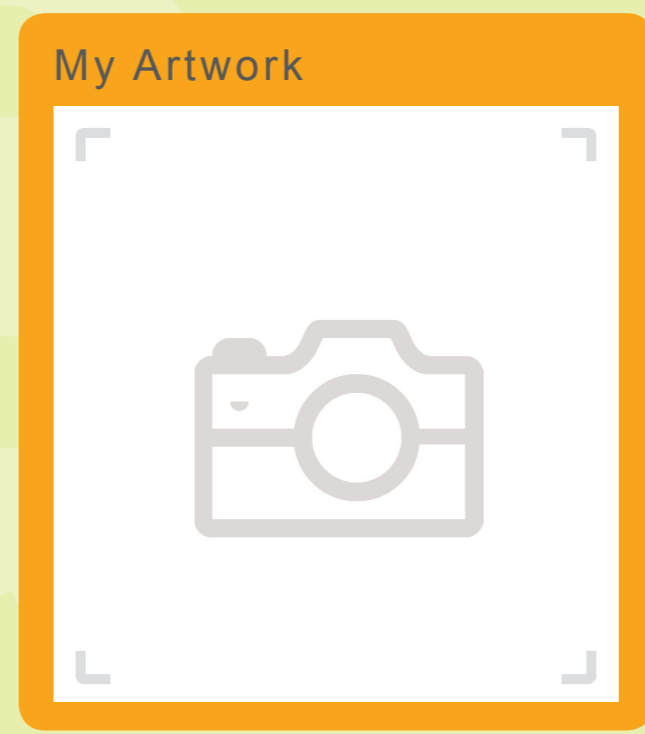
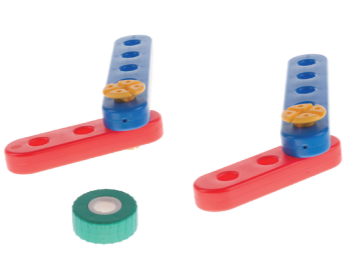
04. Baseball



01. Hurdling



03. Hockey



Evaluation

1
★
Model Design

2
★
Model Creation

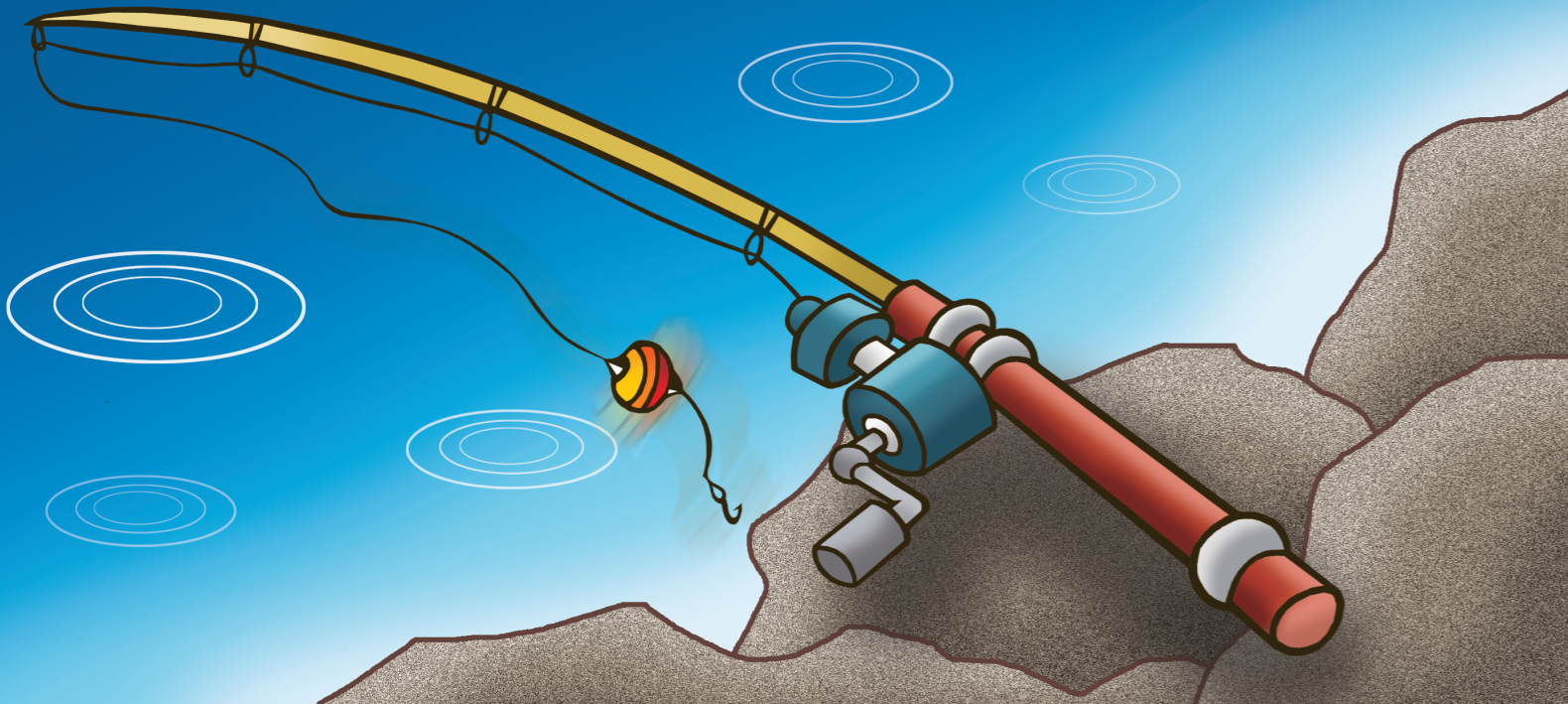
3
★
Winner!

Session 06

Fishing Rod

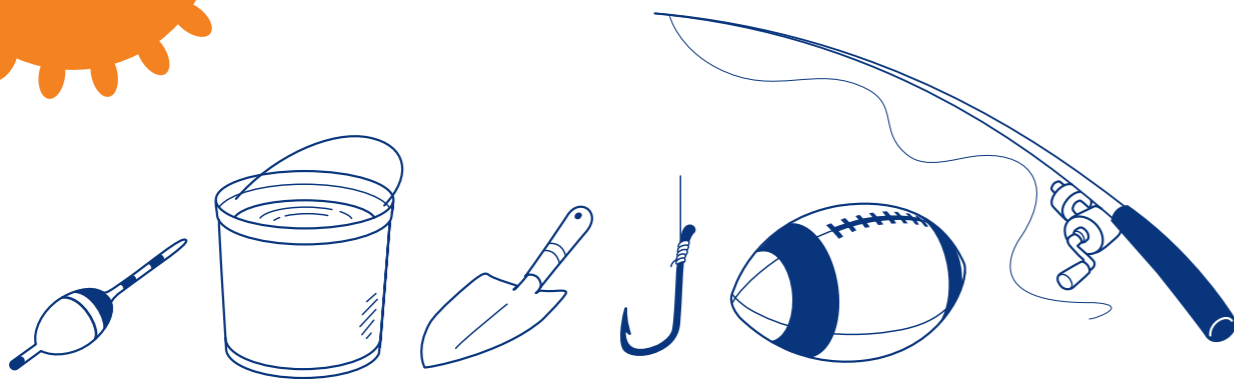


Patience is important in fishing. Wait for the fish to take the bait off the fishhook.



Activity

Try to circle the fishing tools in the following picture.



Assembly Steps

Parts List

x1	x1	x2	x1	x2

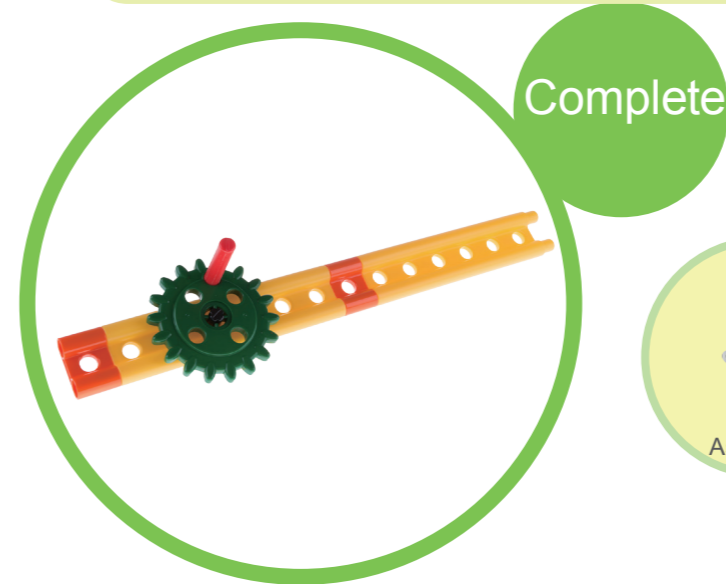


1

2

3

4



Complete

1

Model Assembly

2

Activity

3

Sharing

Evaluation

Session 07

Roller Skate

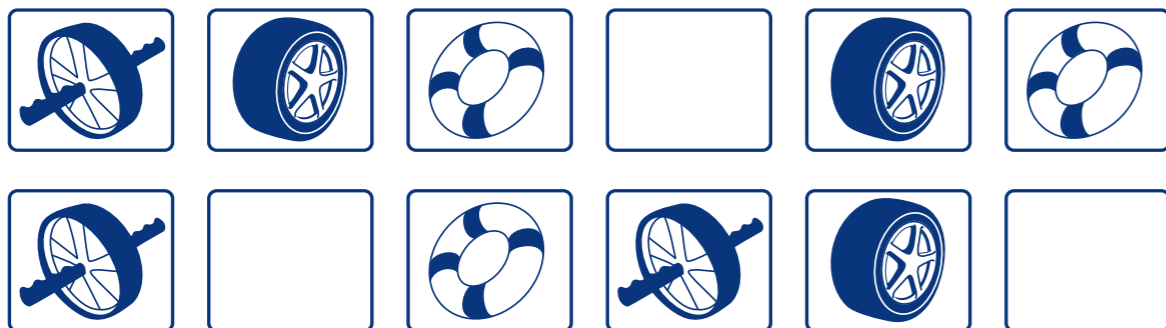
Learning Subject
Rolling, Logical reasoning capability

Roller skates are commonly used for exercising. They are small and convenient to store.



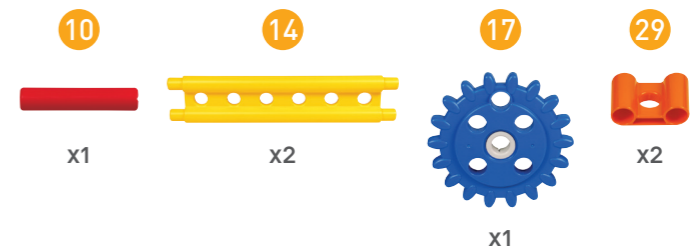
Activity

Look for the picture that fills in the blank.



Assembly Steps

Parts List

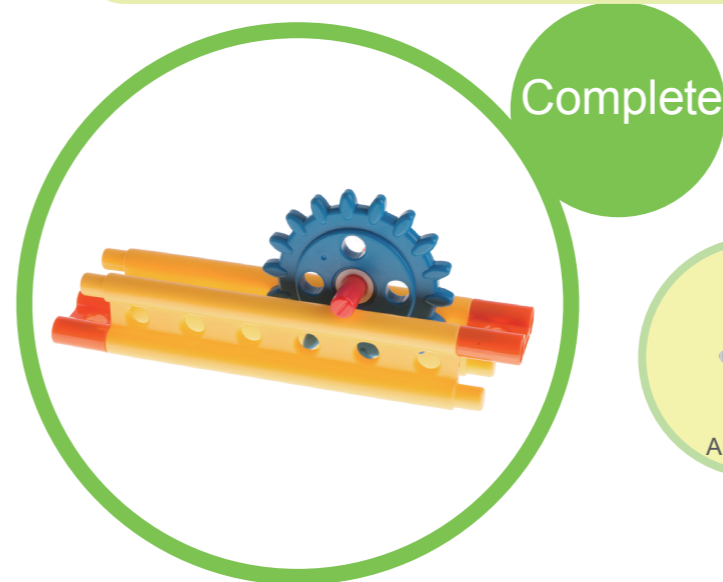


1

2

3

4



Evaluation

<p>1</p> <p>Model Assembly</p>	<p>2</p> <p>Activity</p>	<p>3</p> <p>Sharing</p>
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Session 08

Windmill

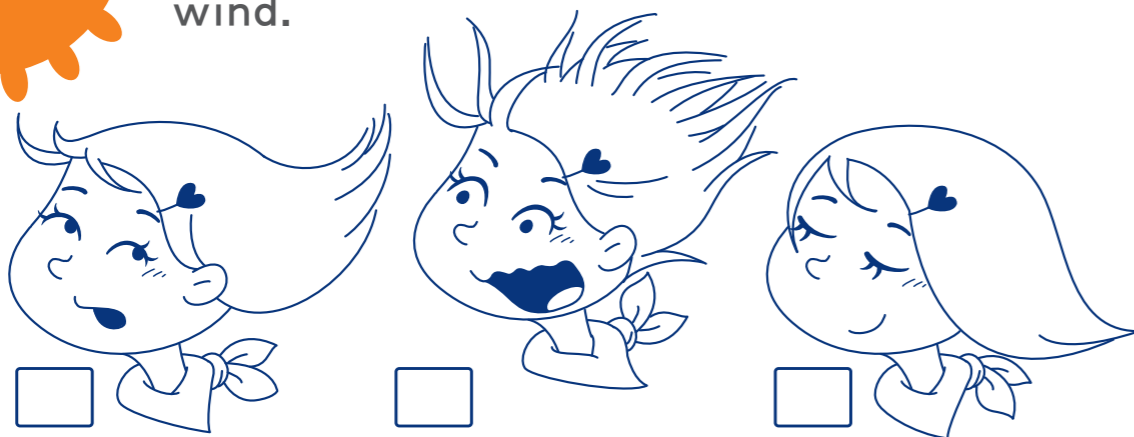
Learning Subject
Wind power,
Observation

We can feel the presence of the wind everywhere. The blades of the windmill move while the wind is blowing gently.



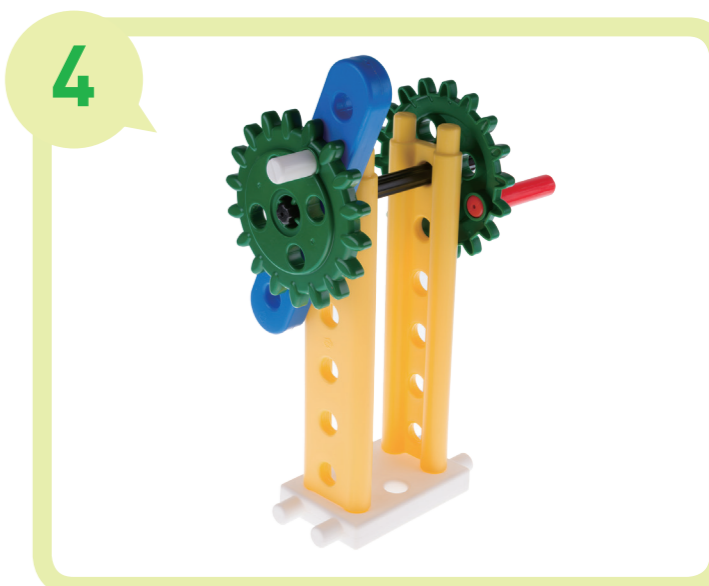
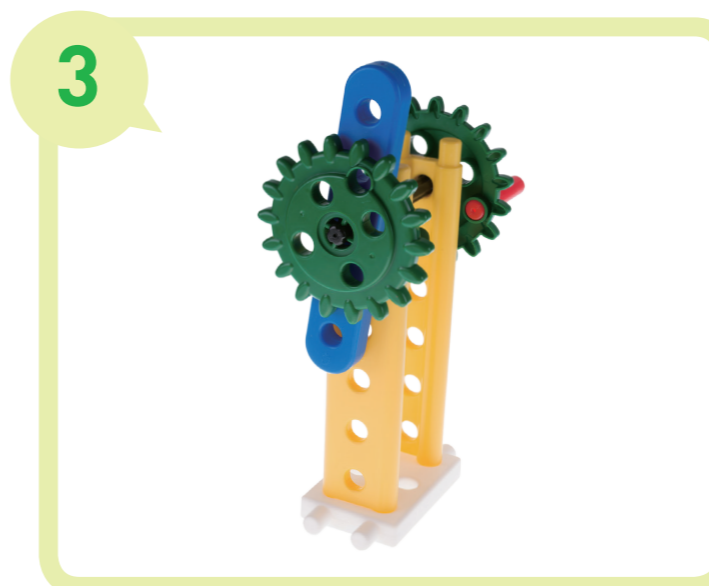
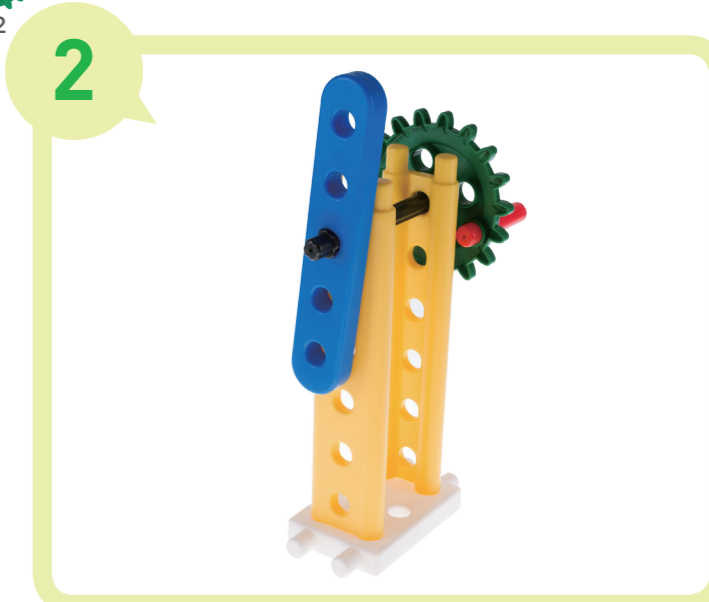
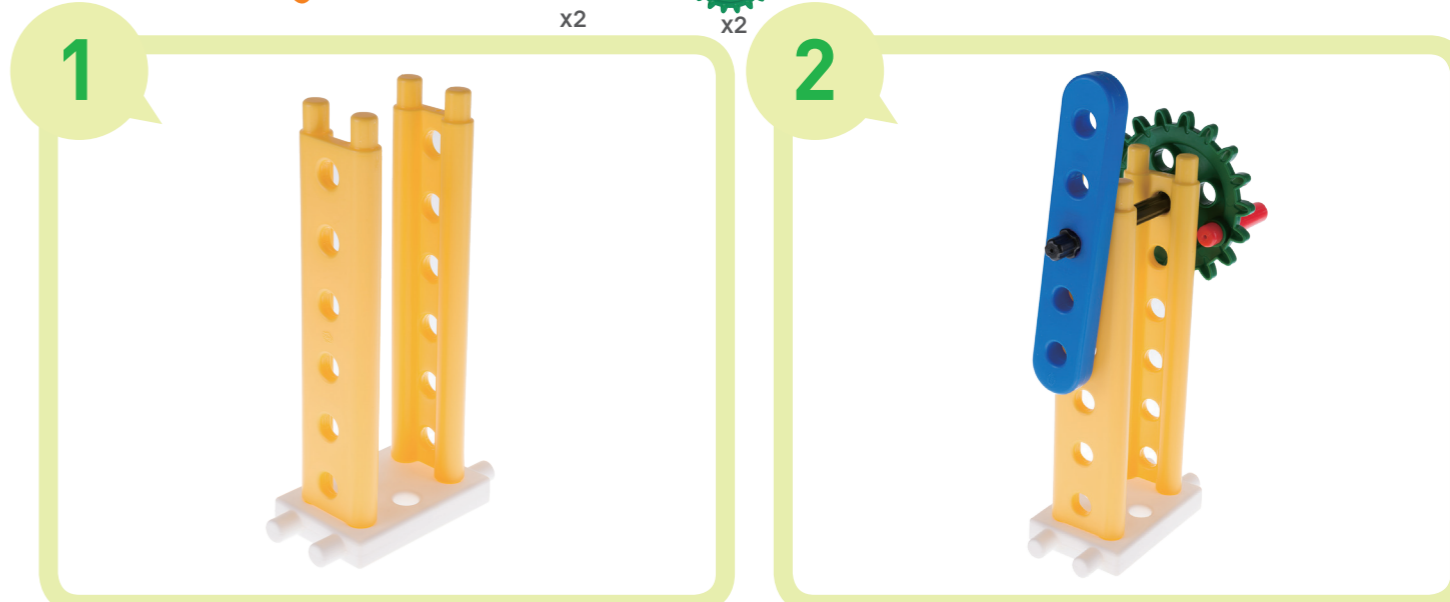
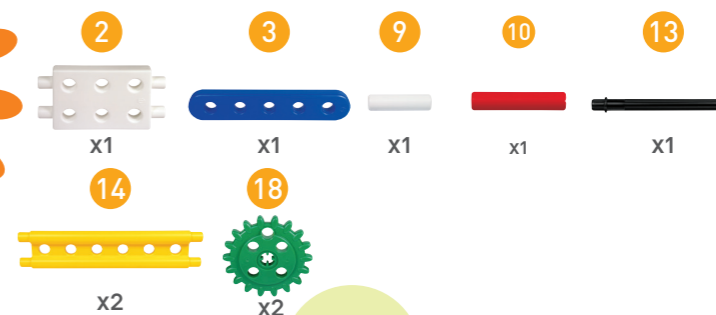
Activity

Compare and arrange the pictures in ascending order based on the force of the wind.



Assembly Steps

Parts List



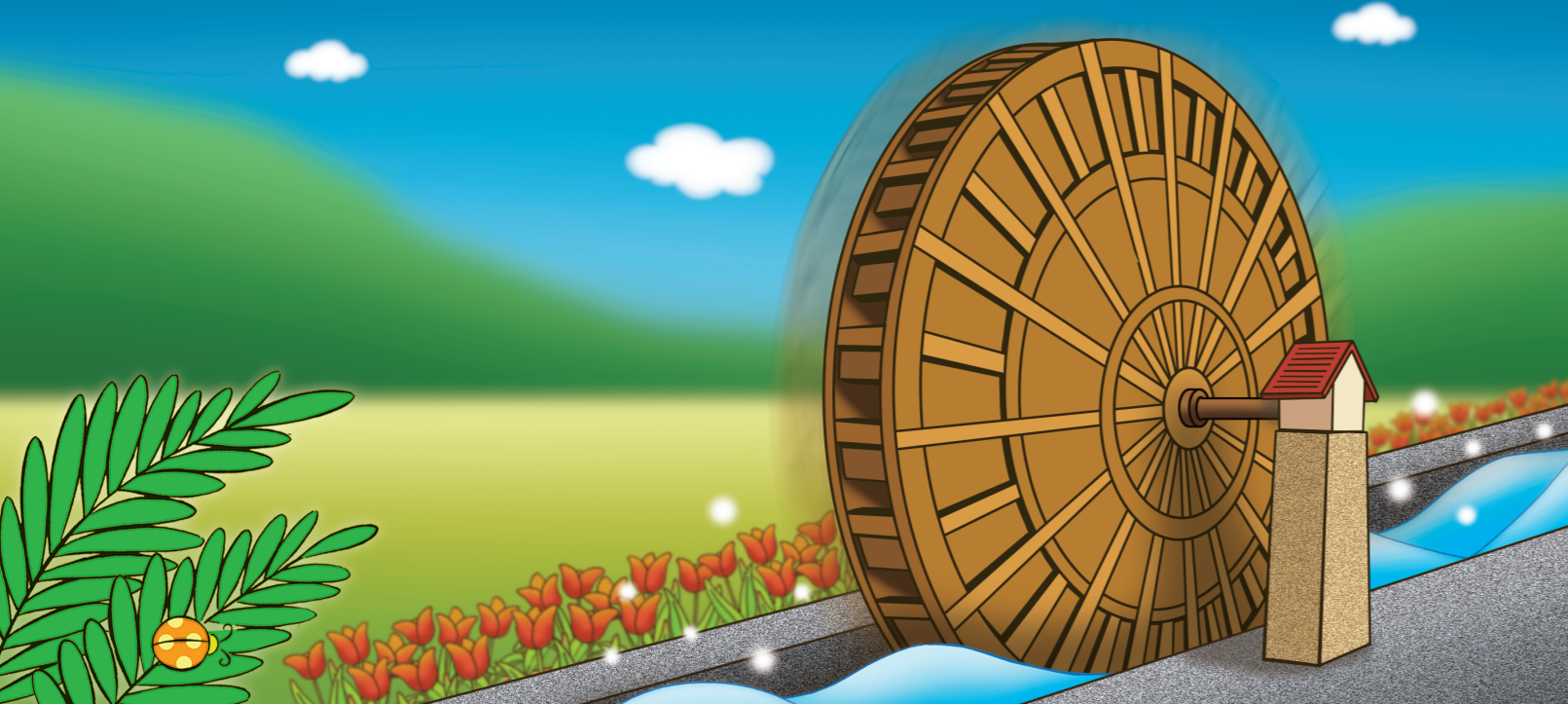
Complete

Evaluation

- 1 Model Assembly
- 2 Activity
- 3 Sharing

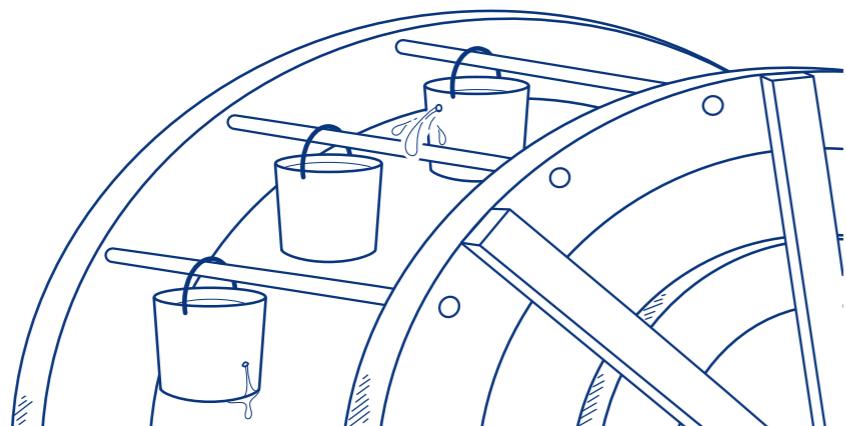
Learning Subject
 Potential energy conversion,
 Problem-solving skills

A waterwheel moves by means of hydro energy which rotates the blades.











Activity

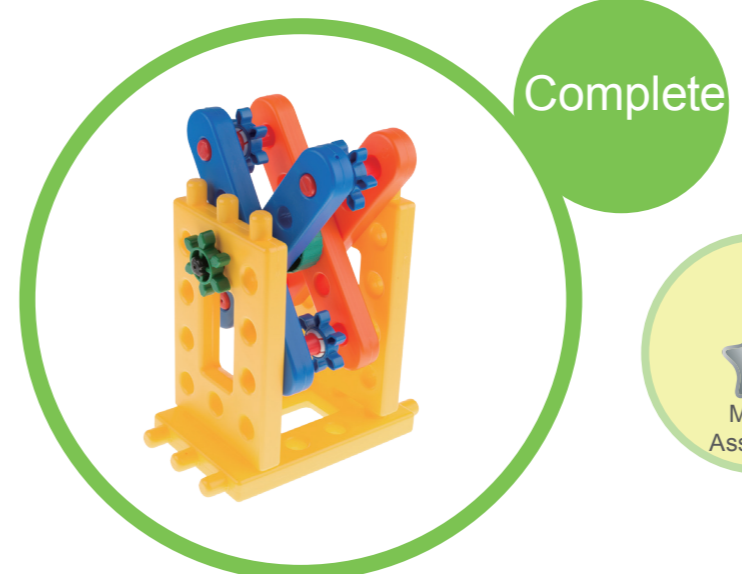
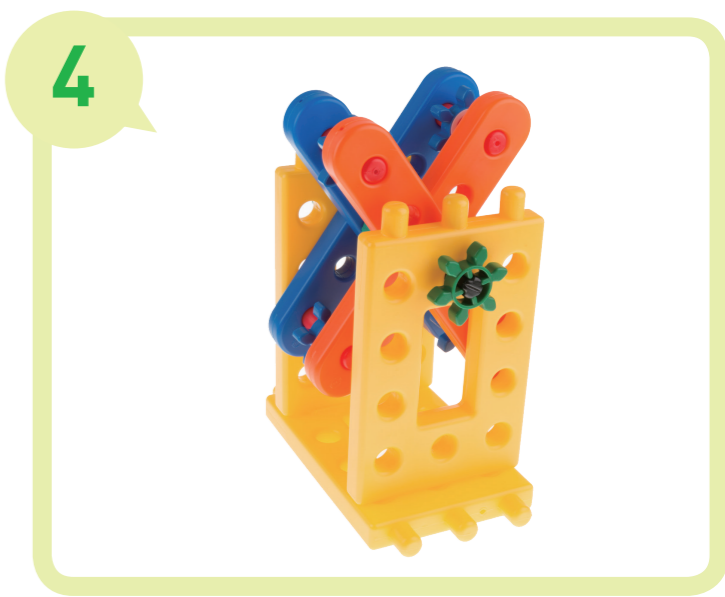
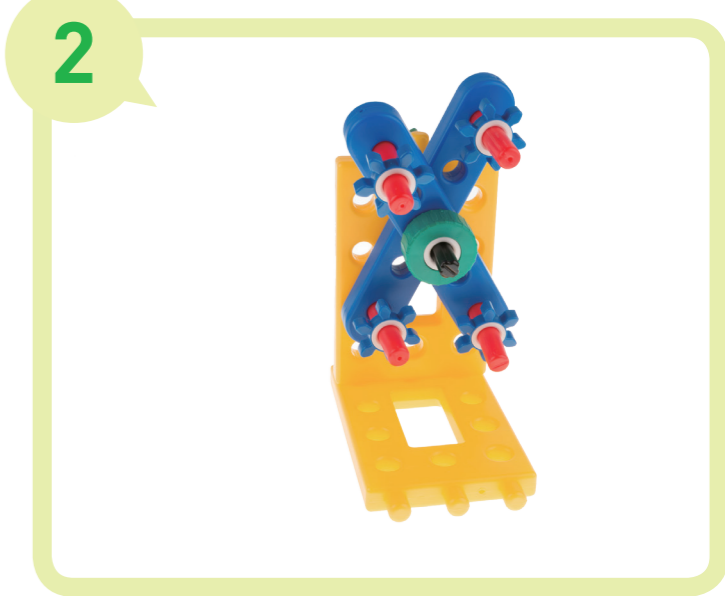
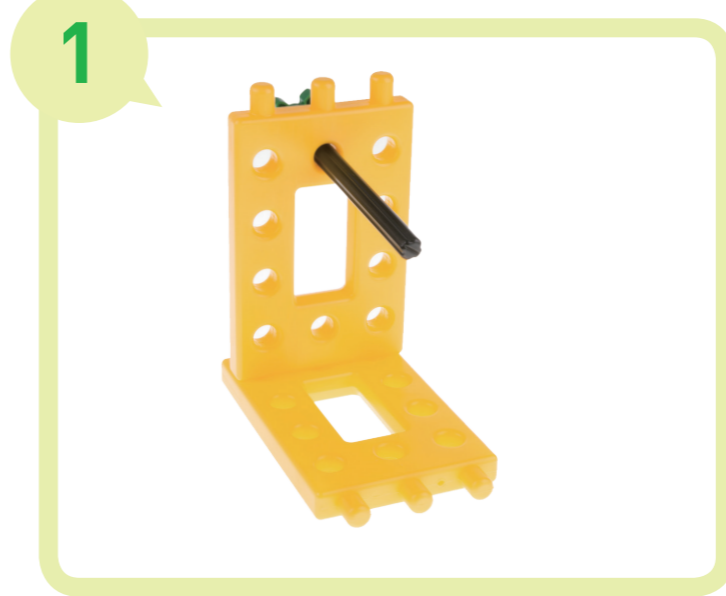
There are many buckets hanging on the waterwheel and one of them has a crack. Please fix the crack using a marker pen.



Assembly Steps

Parts List

 1 x3	 3 x2	 4 x2	 10 x4	 13 x1
 19 x4	 20 x2	 21 x1		



Evaluation

Session 10

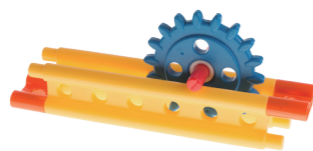
Creation Contest - Propeller

The propellers of a helicopter are an important design to enable the helicopter to fly up and down.



Model Review

07. Roller Skate



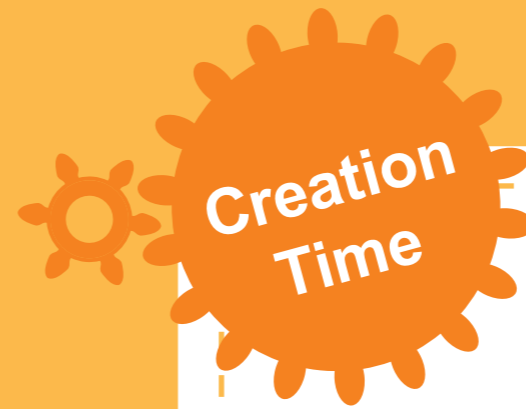
09. Waterwheel



06. Fishing Rod



08. Windmill



Please assemble a helicopter using building blocks. Do not forget the most important part - the propellers.

My Artwork



1



Model Design

2



Model Creation

3



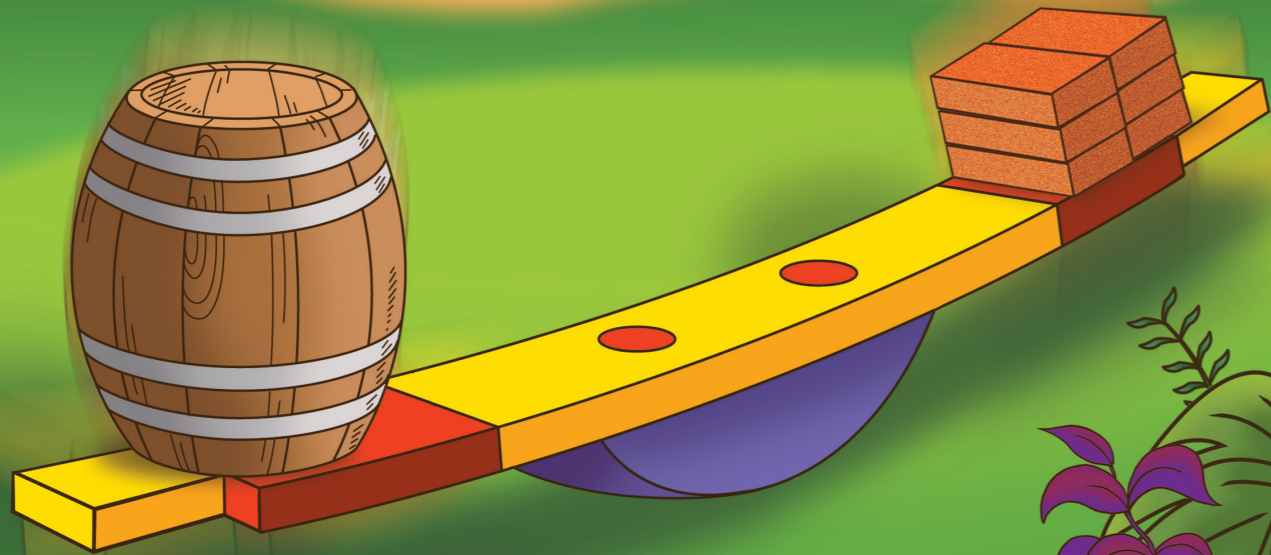
Winner!

Session 11

Balance Beam

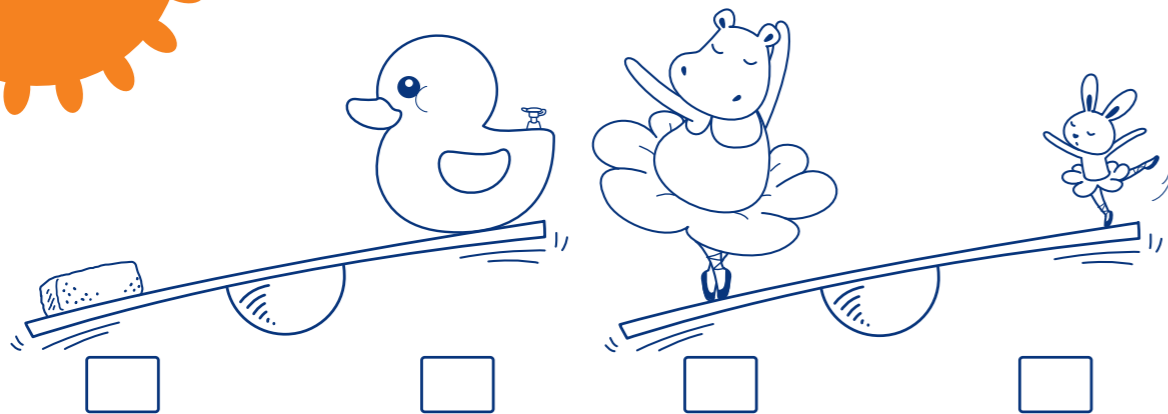


Place two balls of different weights on each side of the balance beam and guess how the balance beam would move.



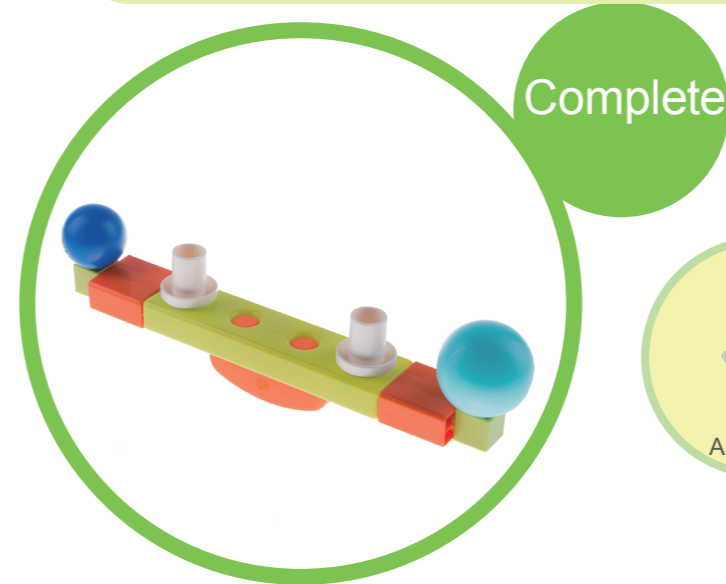
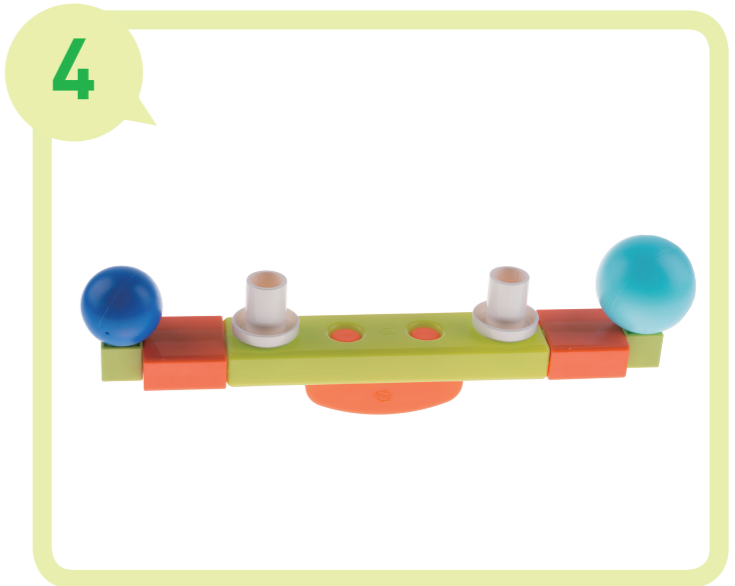
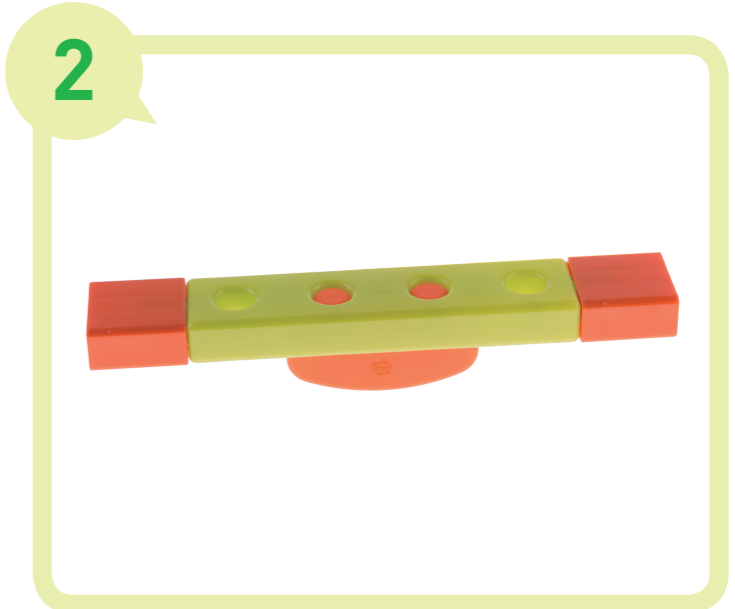
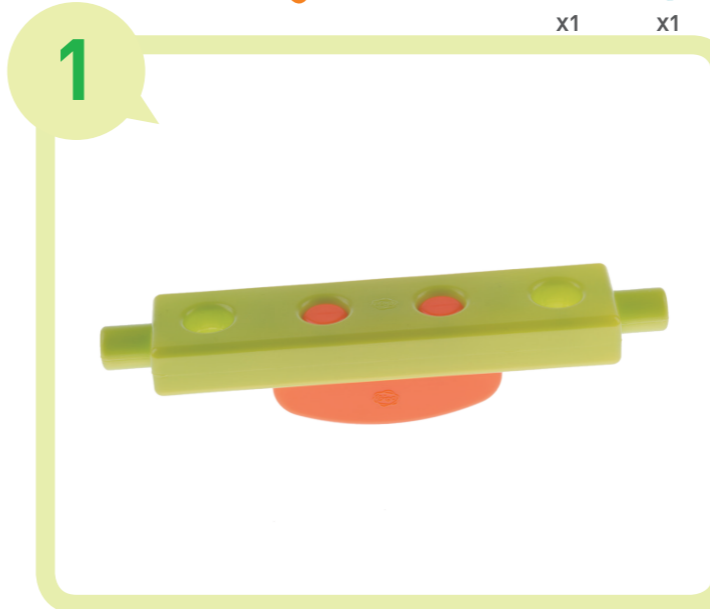
Activity

Compare and put the marks on the heavier pieces on the pictures.



Assembly Steps

Parts List

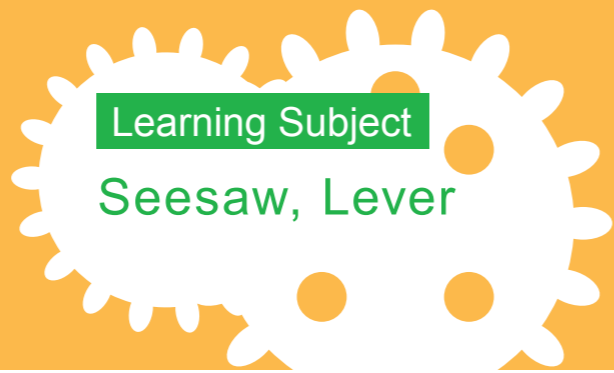


Evaluation

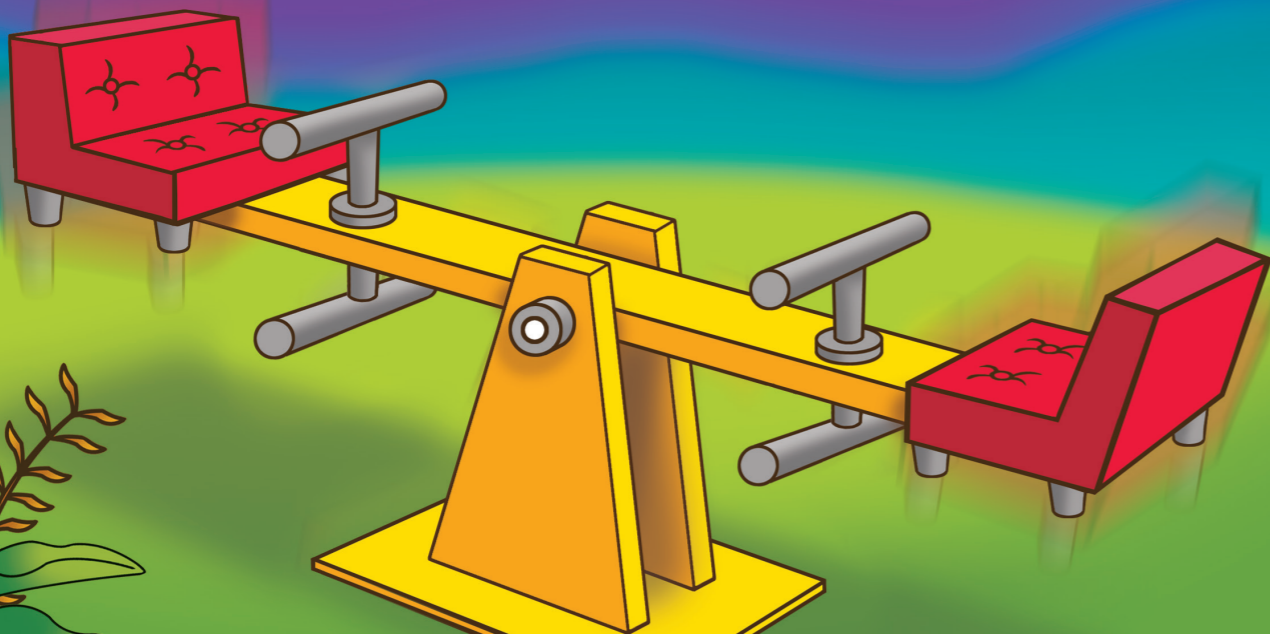


Session 12

Seesaw

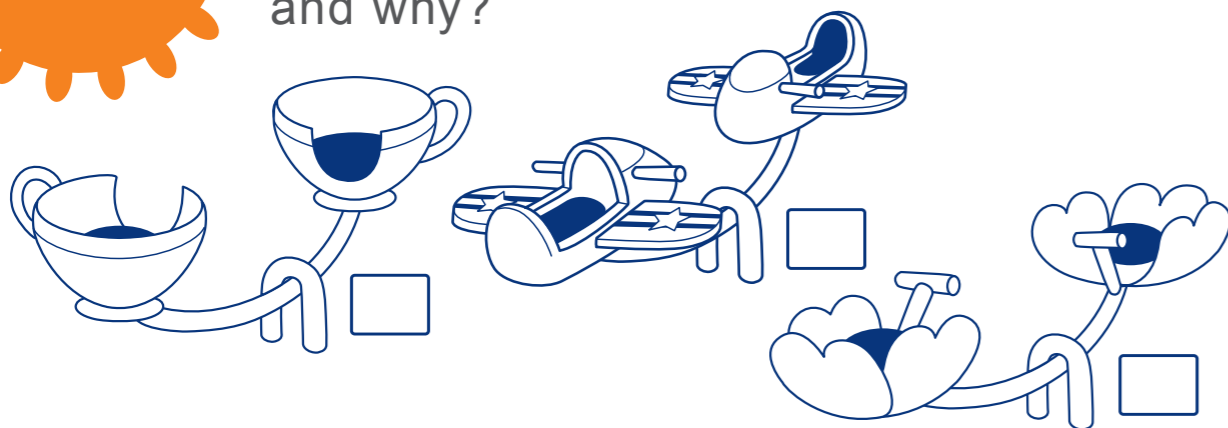


A seesaw is a common recreational equipment in the park. The tilting of a seesaw depends on where a person sits.



Activity

Look at the three types of seesaws shown below. Which one do you like best and why?



Assembly Steps

Parts List

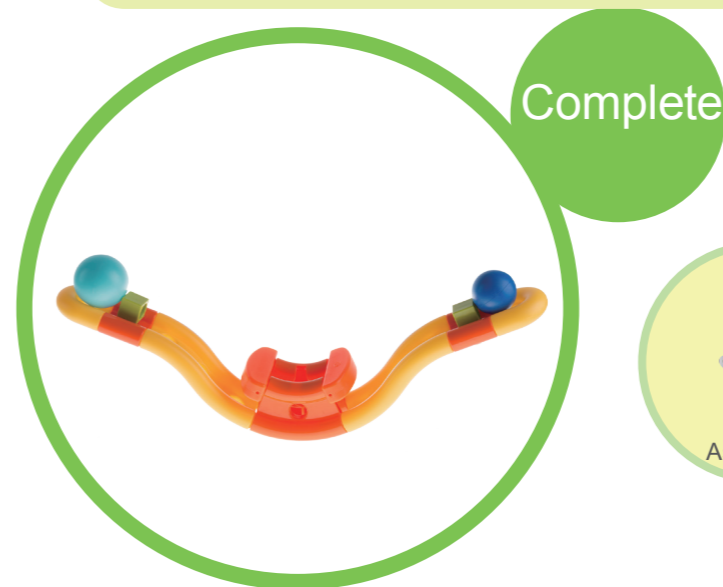


1

2

3

4



Evaluation

1

Model Assembly

2

Activity

3

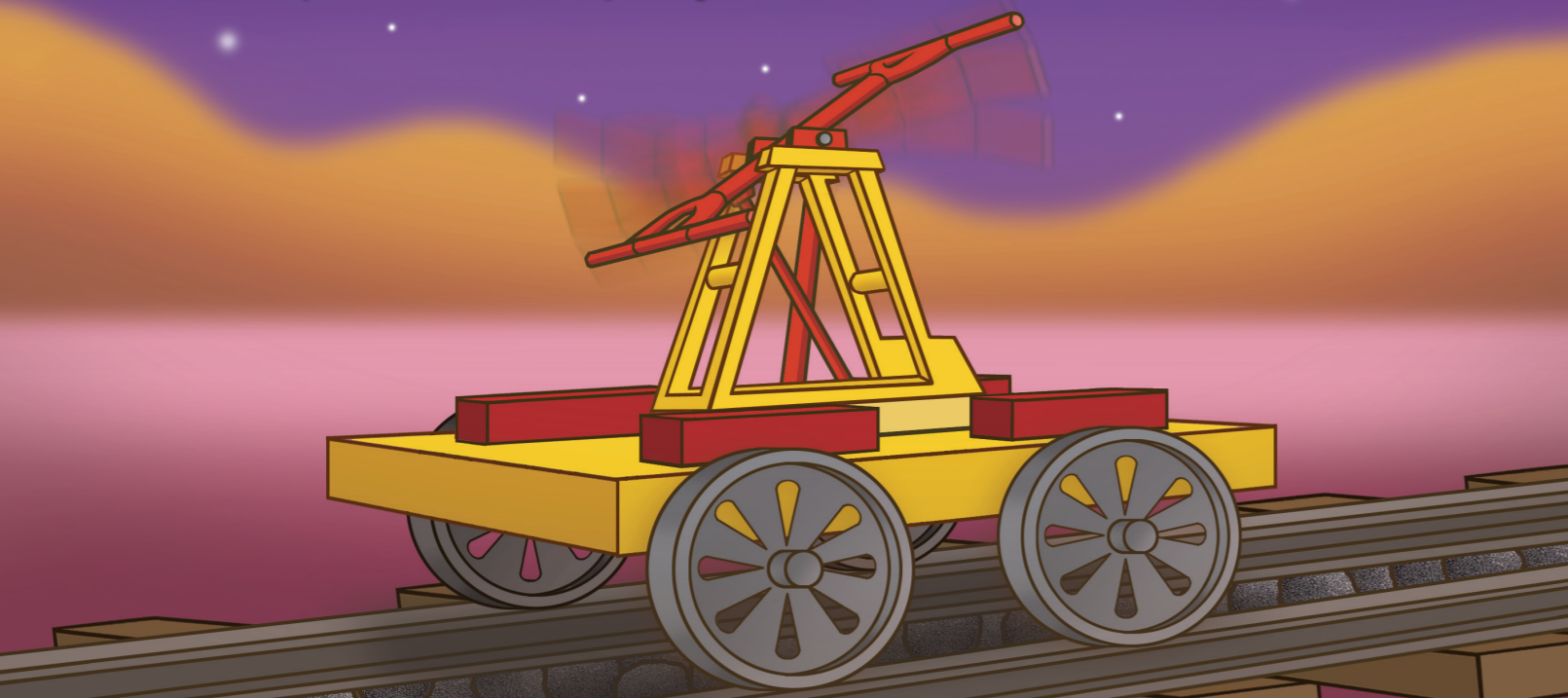
Sharing

Session 13

Trebuchet

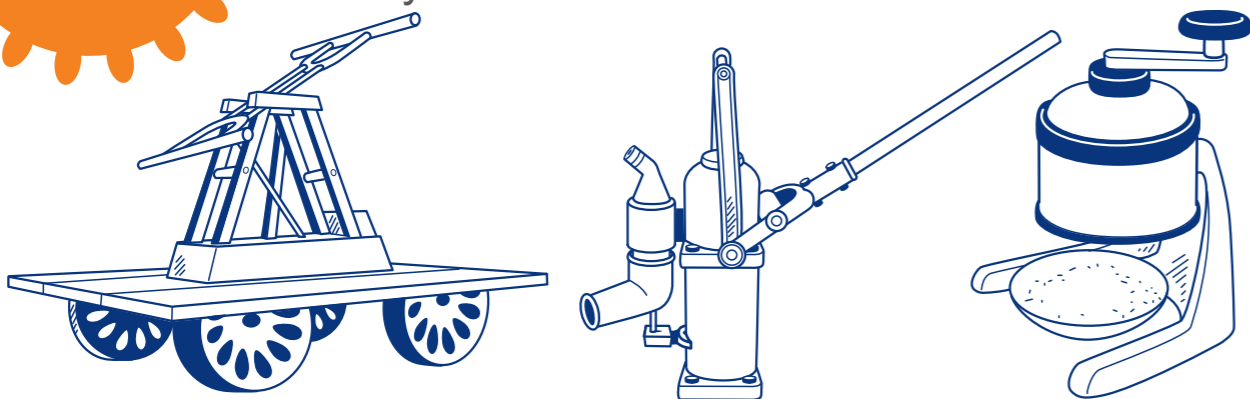
Learning Subject
 Press and pull,
 Associative ability

Through its press and pull design, a trebuchet can help throw a projectile at a distance.




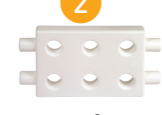



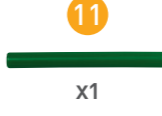

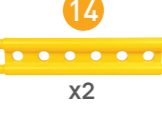


Activity

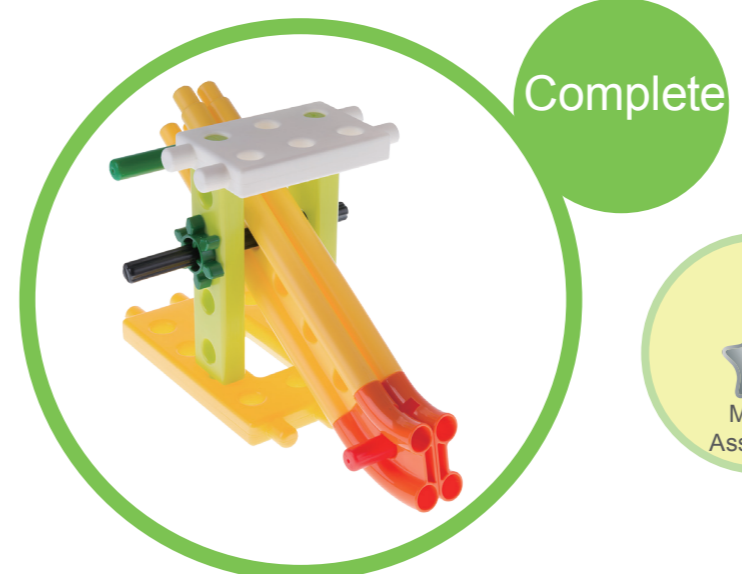
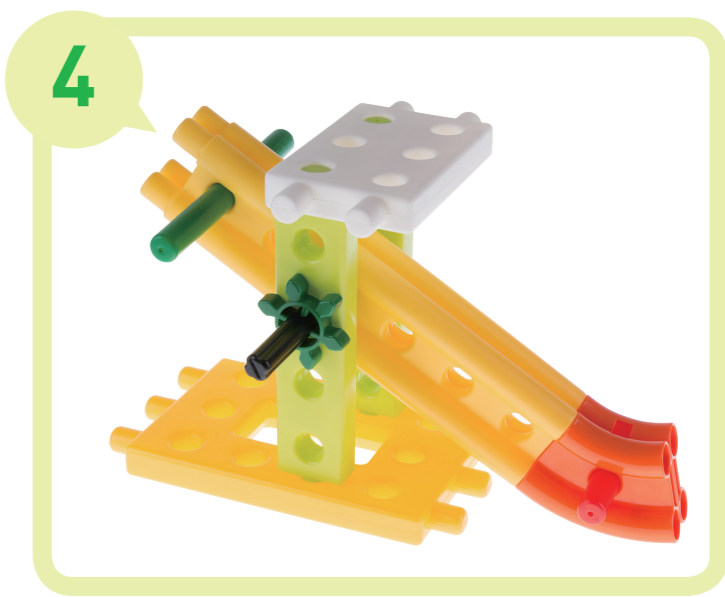
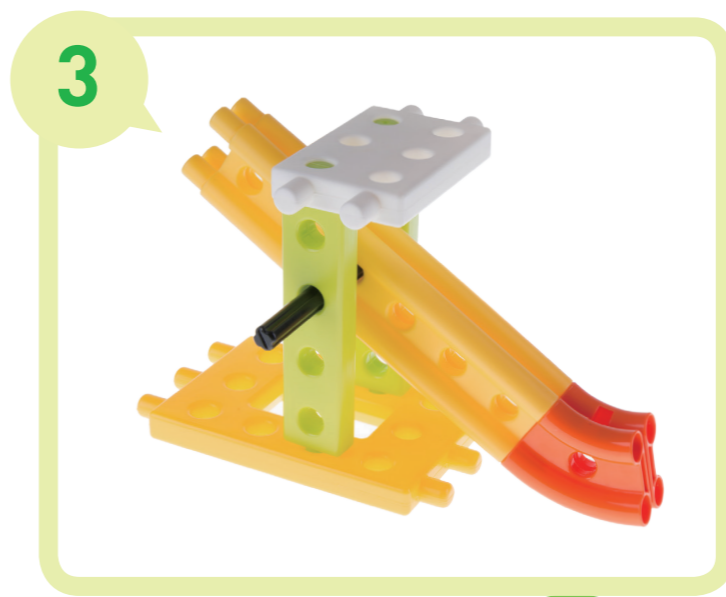
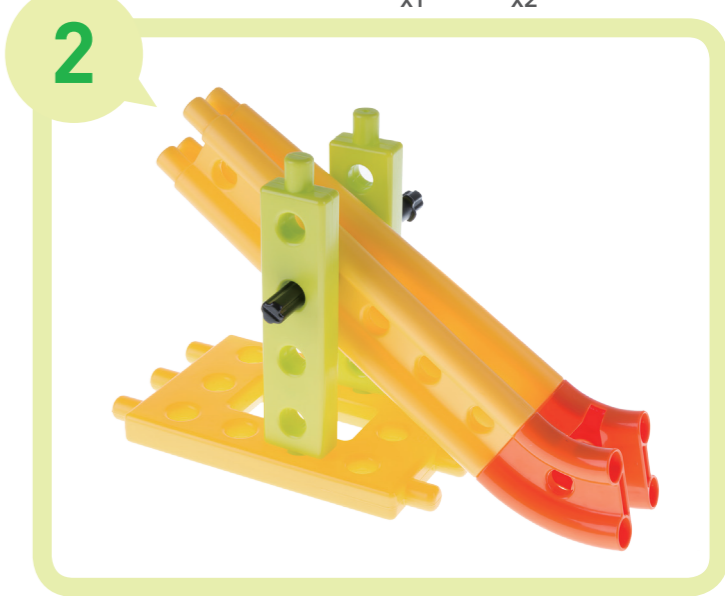
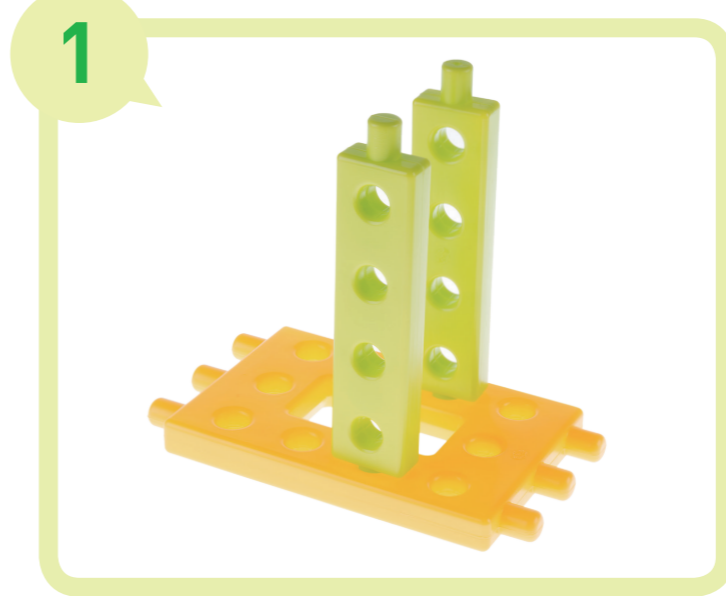
In the following picture, put the marks on the ones that apply the press and pull theory.



Assembly Steps

Parts List

 1 x1	 2 x1	 6 x2	 10 x1	
 11 x1	 13 x1	 14 x2	 20 x1	 30 x2

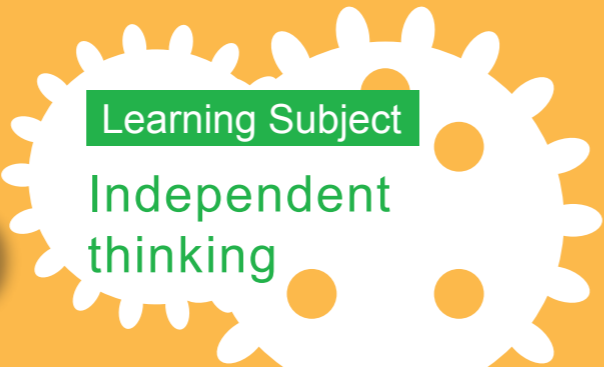


Evaluation

 1 Model Assembly	 2 Activity	 3 Sharing
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Session 14

Pirate Ship



It is terrifying aboard the pirate ship as it suddenly moves down from the highest point.



Assembly Steps

Parts List

- 1

x1
- 5

x1
- 6

x1
- 9

x3
- 13

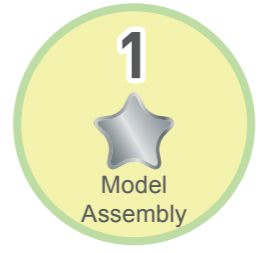
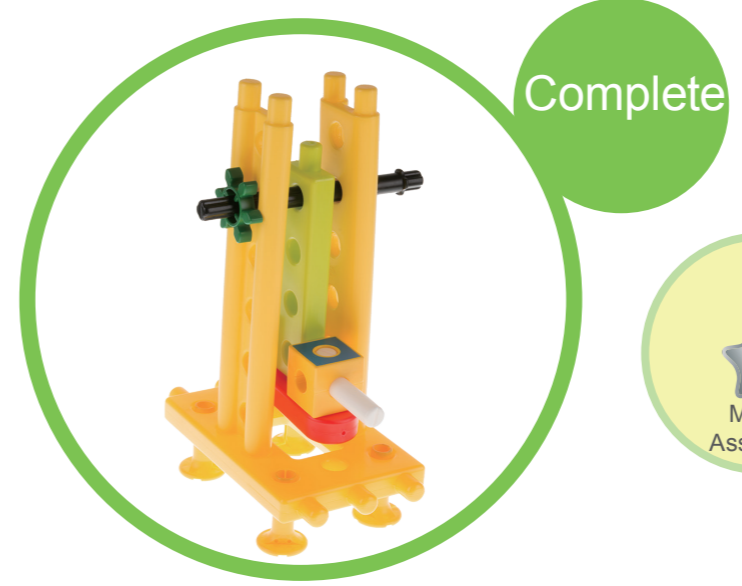
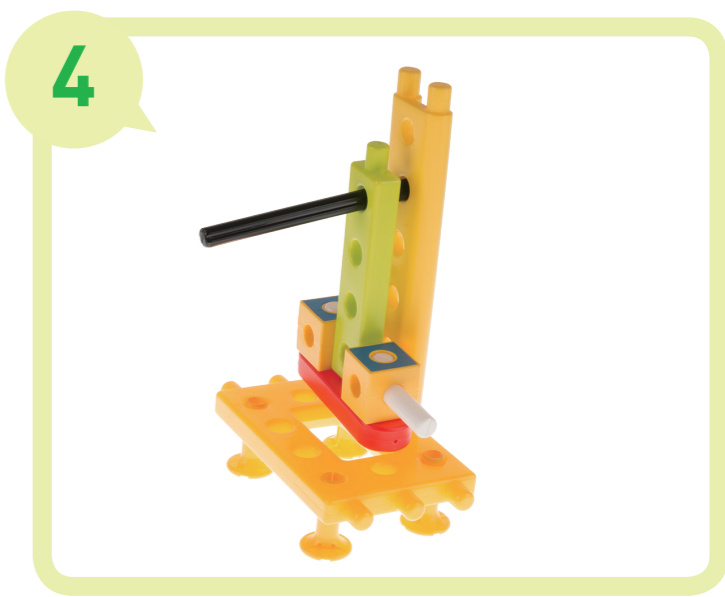
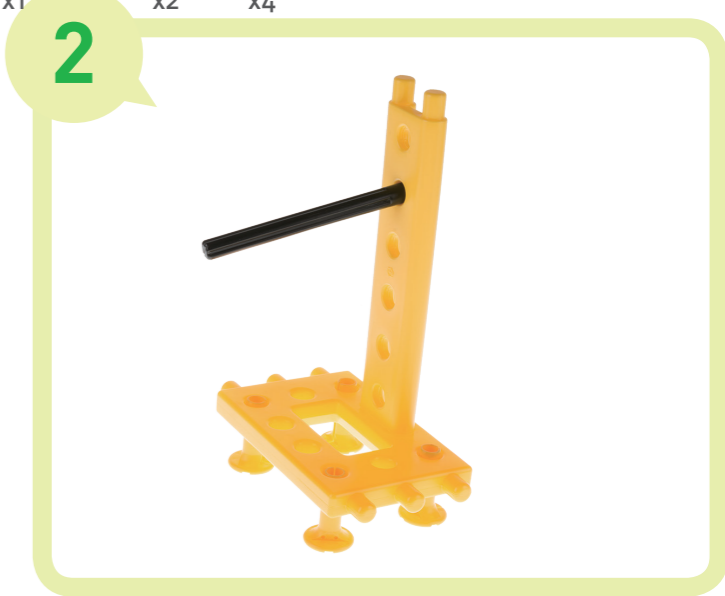
x1
- 14

x2
- 20

x1
- 24

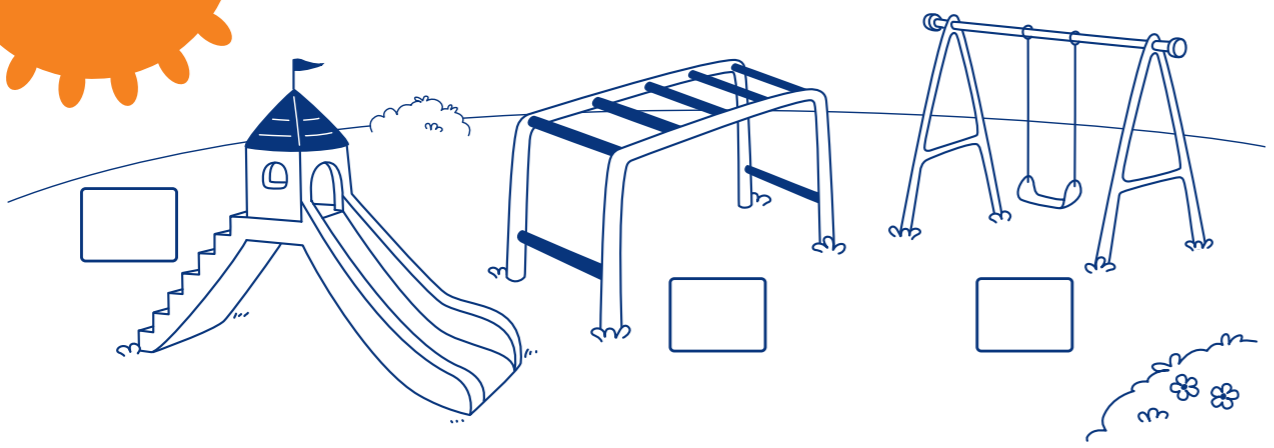
x2
- 35

x4



Activity

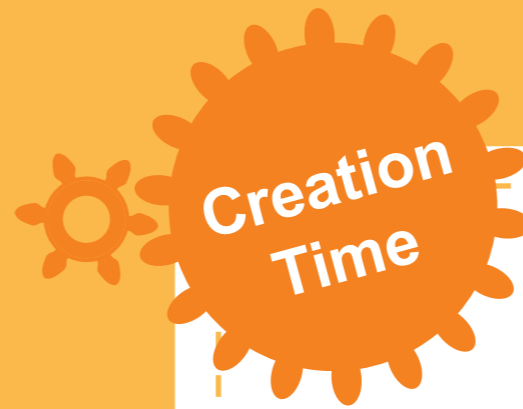
Which of the following recreational equipment sways back and forth?



Session 15

Creation Contest - Rocking Horse

Kids love riding on a rocking horse. Now, you can have fun riding it.



Kids, do you like playing on a rocking horse? Use building blocks to make your horse.

我的作品照



1



Model Design

2



Model Creation

3



Winner!

Model Review

12. Seesaw



14. Pirate Ship



11. Balance Beam



13. Trebuchet

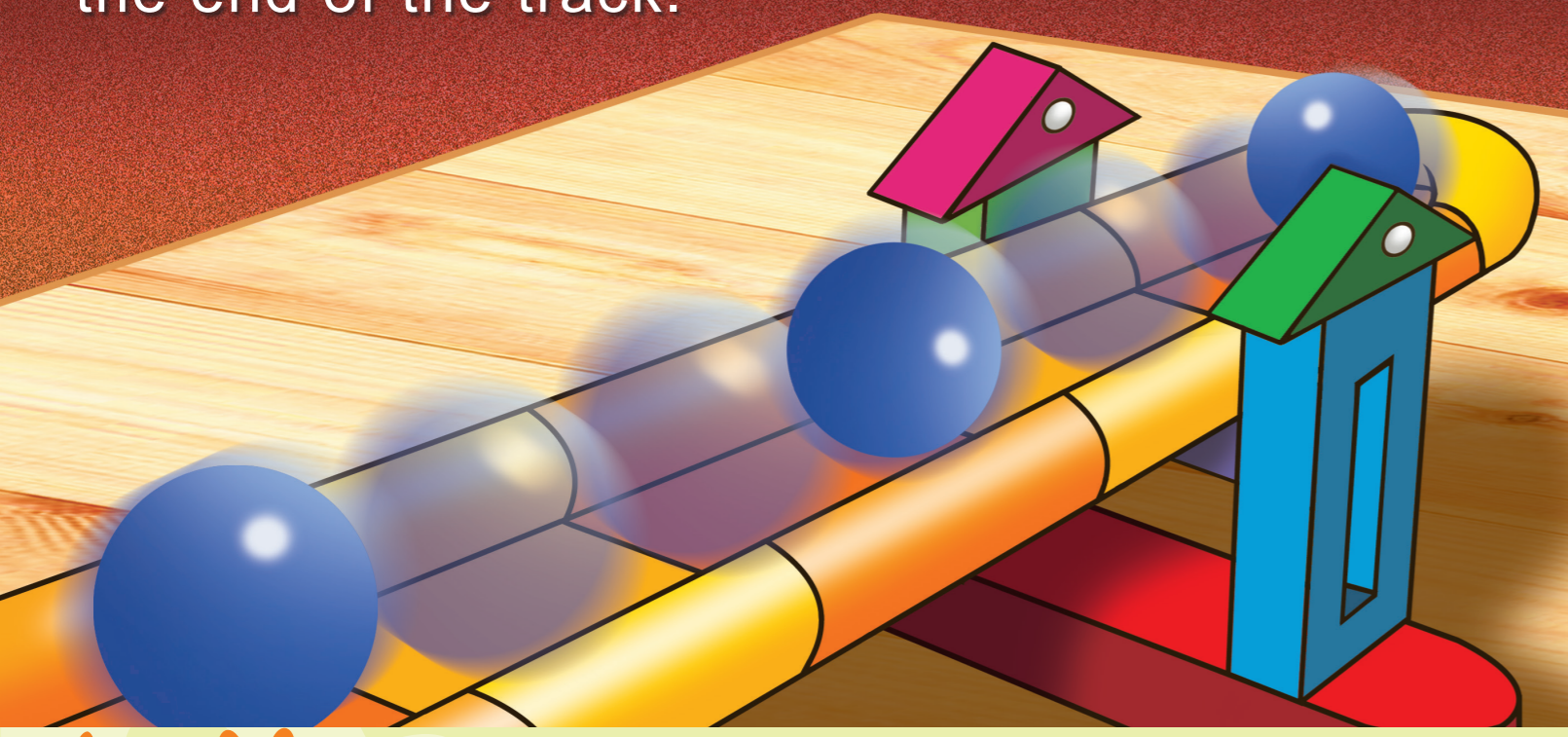


Session 16

Moving Straight

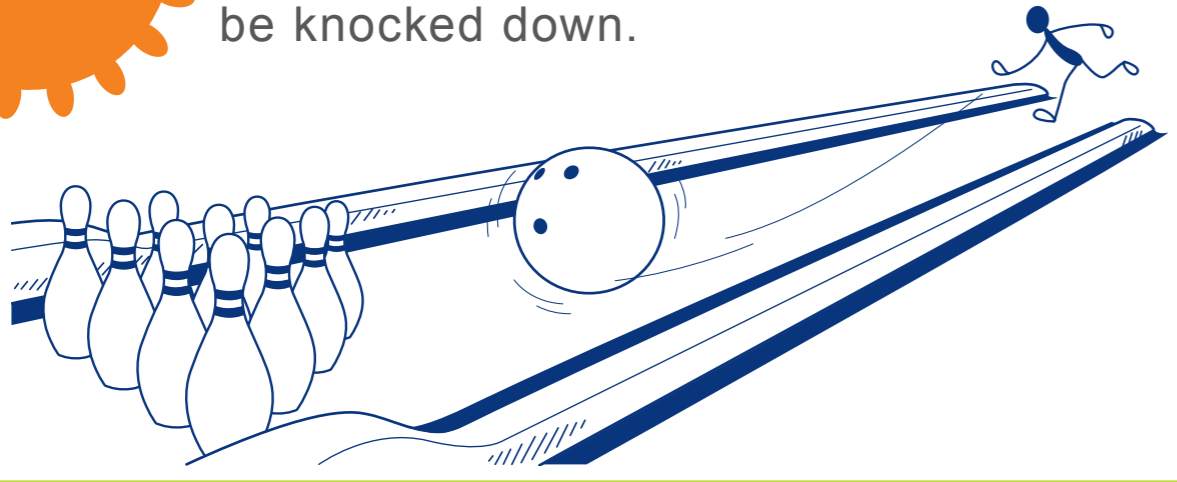
Learning Subject
Track, Gravity

The ball goes straight forward until it reaches the end of the track.



Activity

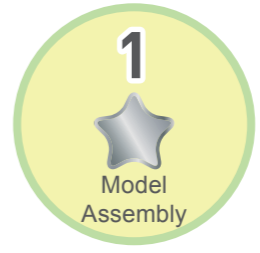
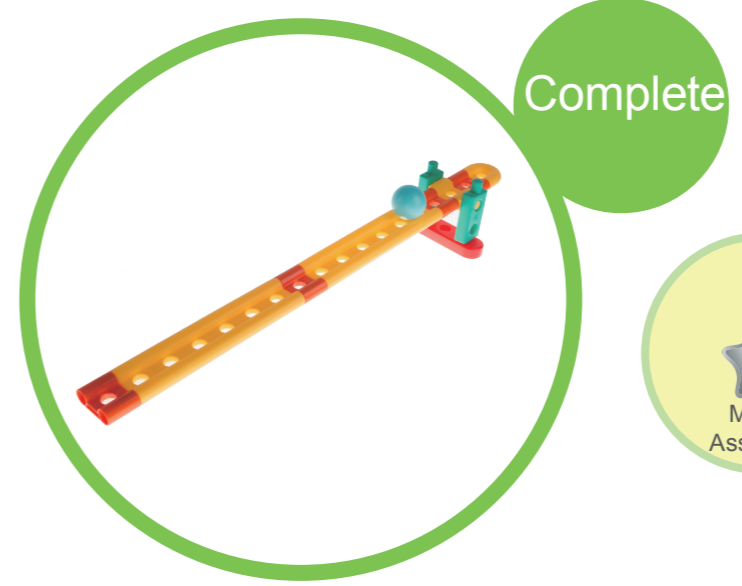
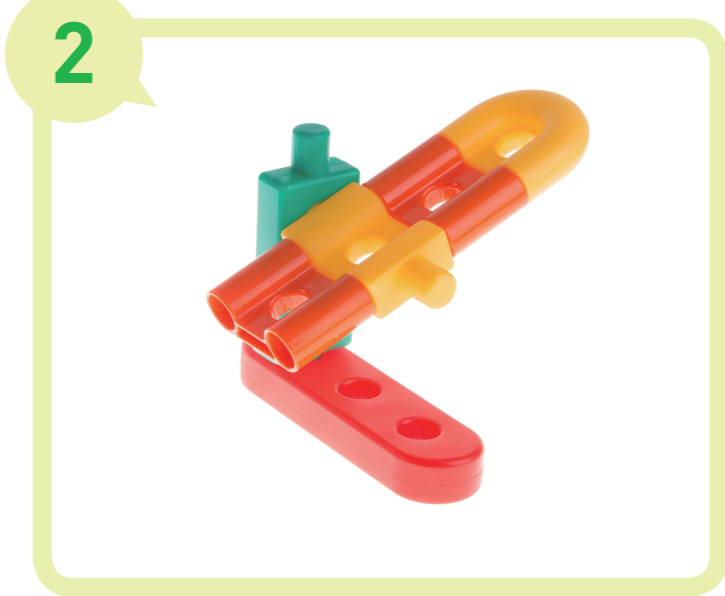
Try to put some building blocks at the end of the track. See how many of them will be knocked down.



Assembly Steps

Parts List

- 5 x1 (Red Technic Beam 1x5)
- 8 x2 (Green Technic Pin)
- 14 x2 (Yellow Technic Beam 1x14)
- 25 x1 (Blue Technic Pin)
- 26 x1 (Yellow Technic Pin)
- 29 x4 (Red Technic Pin)
- 41 x1 (Blue Technic Ball)



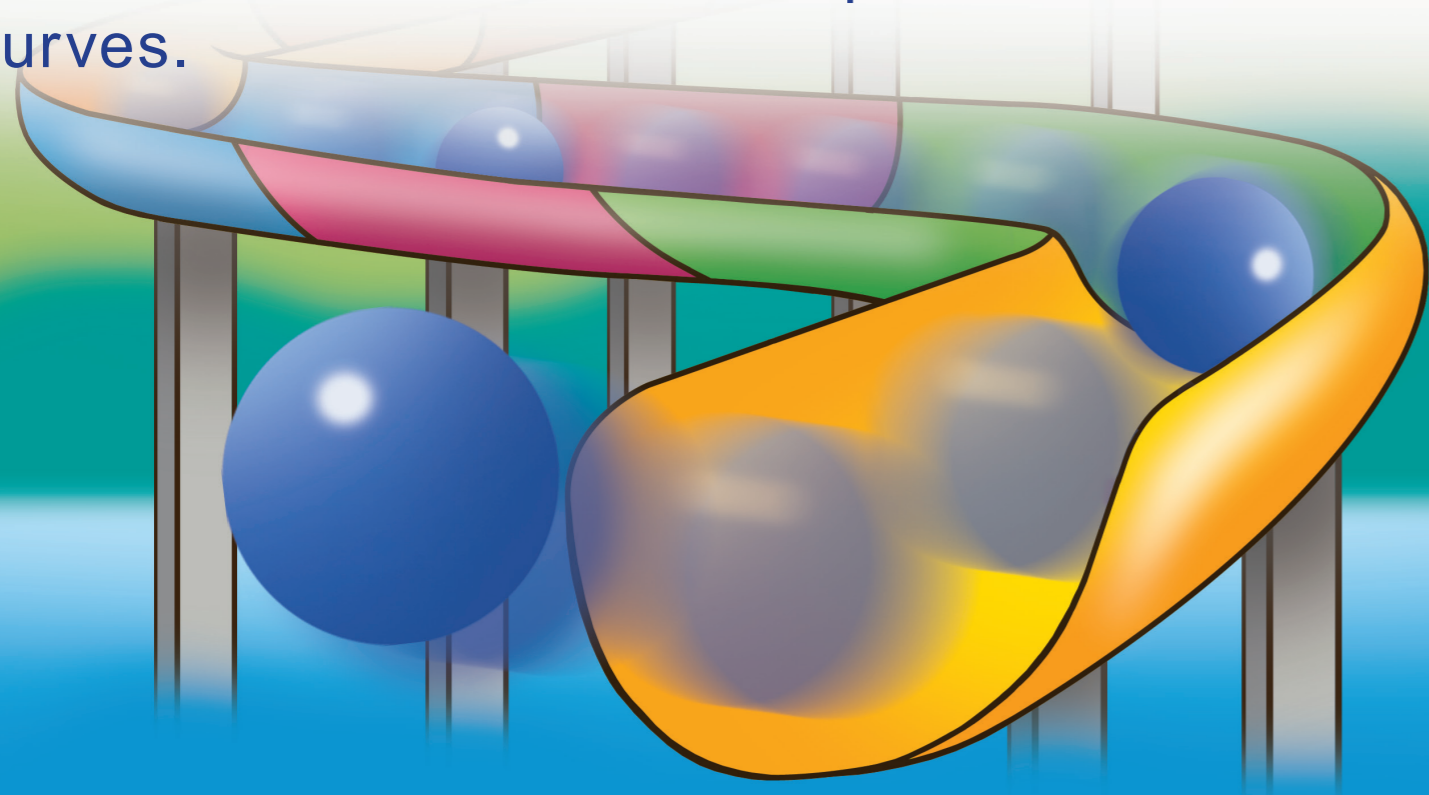
Evaluation

Session 17

Track Curve

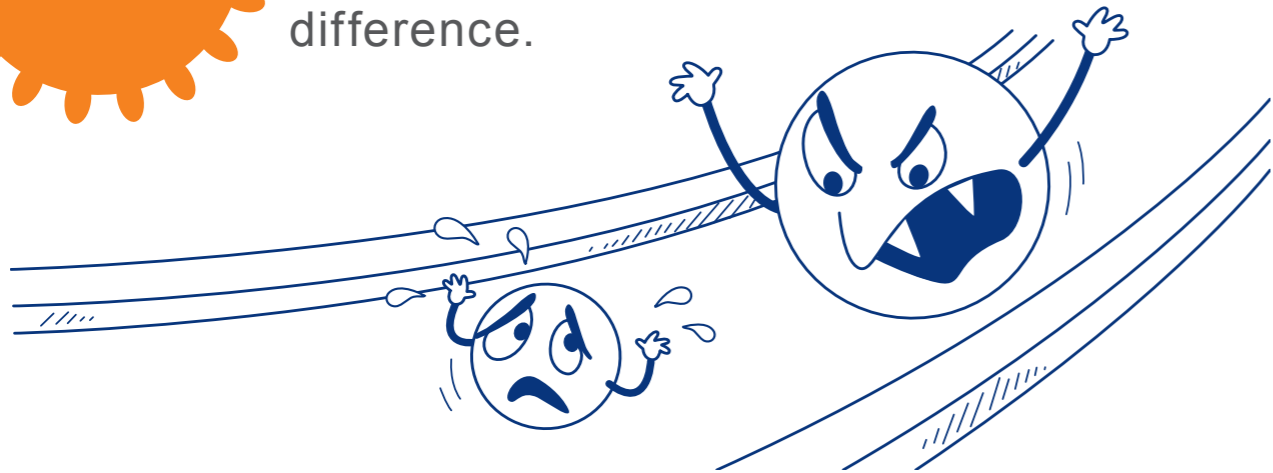


Balls swerve into different paths on the track curves.



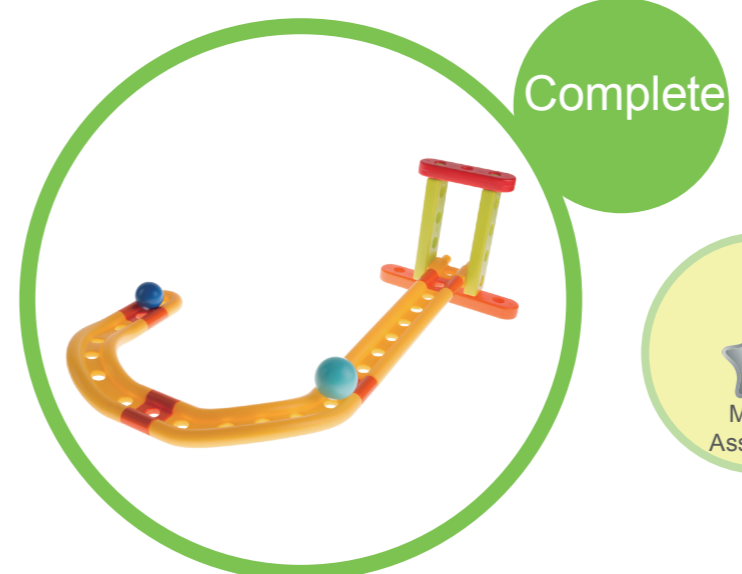
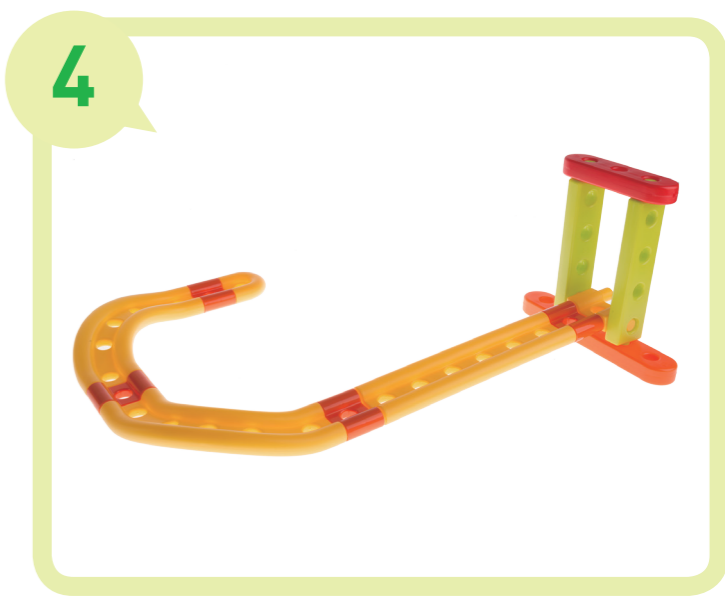
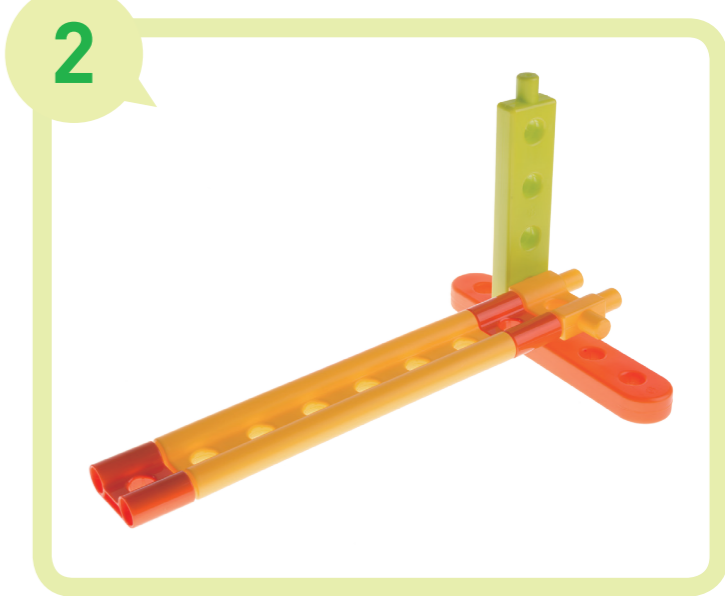
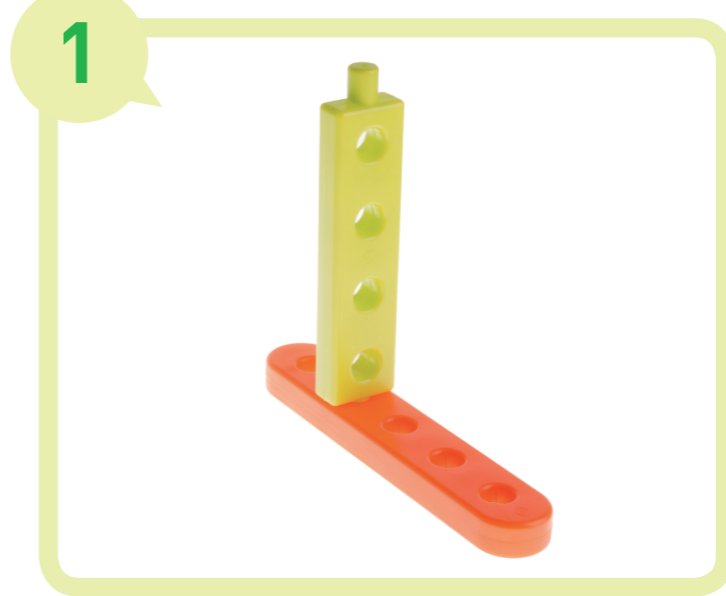
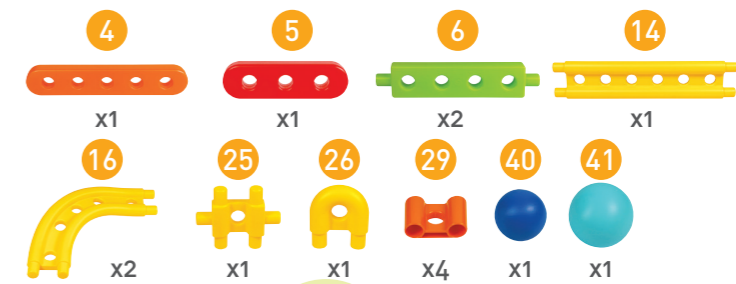
Activity

Take two balls in different sizes. Observe their rolling movements and analyze the difference.

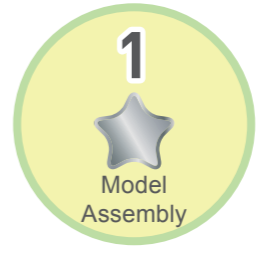


Assembly Steps

Parts List

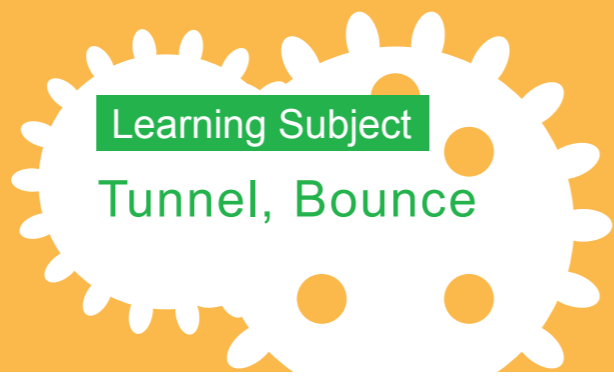


Complete

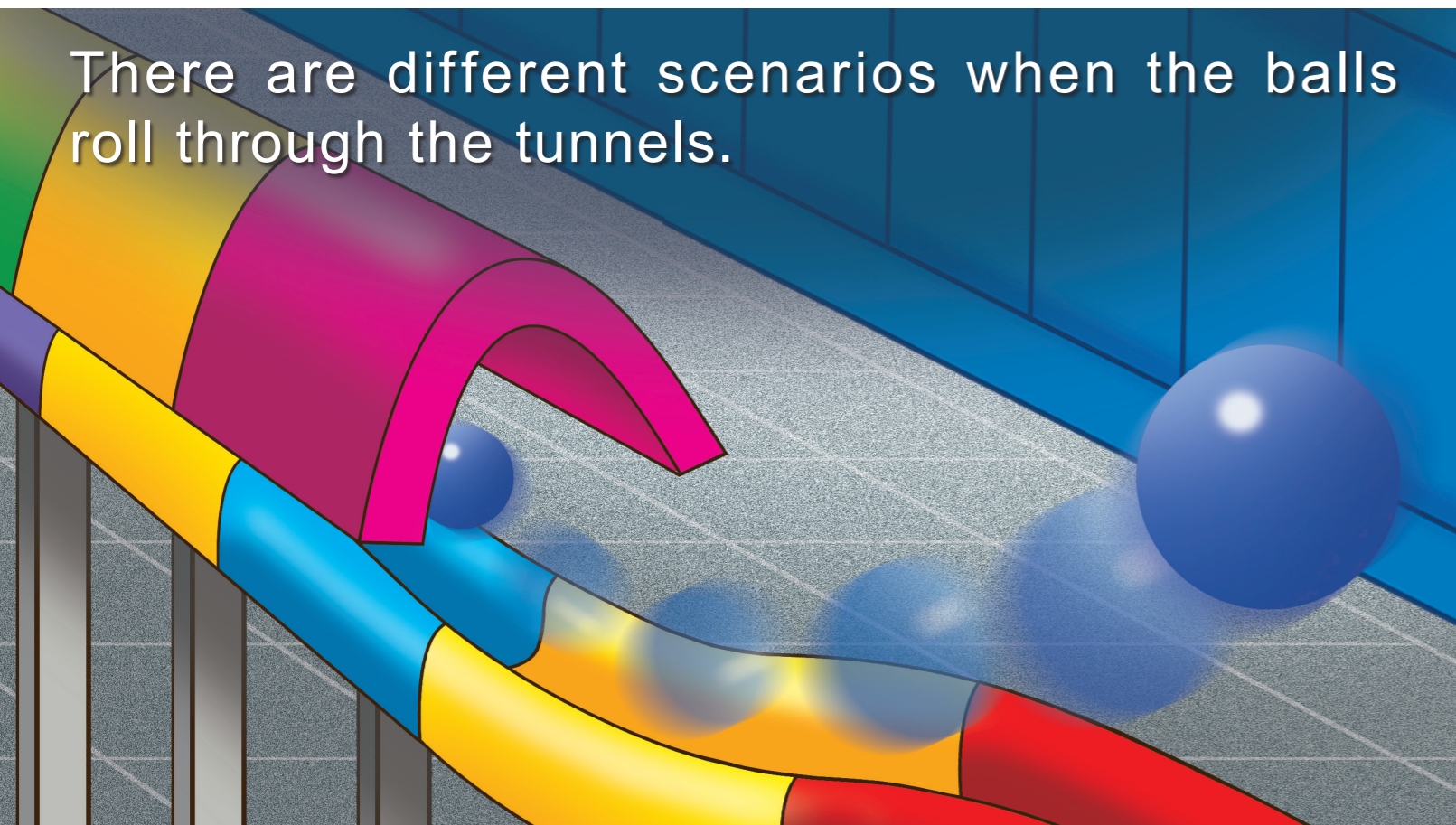


Evaluation

Session 18 Tunnel



There are different scenarios when the balls roll through the tunnels.





Assembly Steps

Parts List




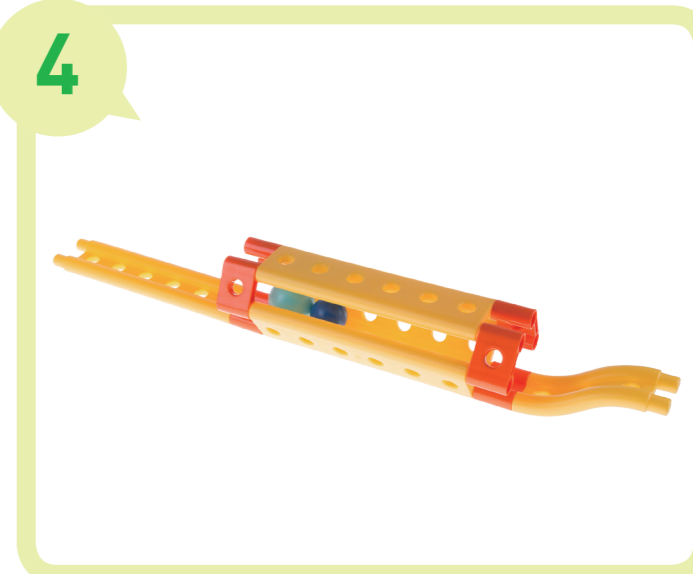
- 14

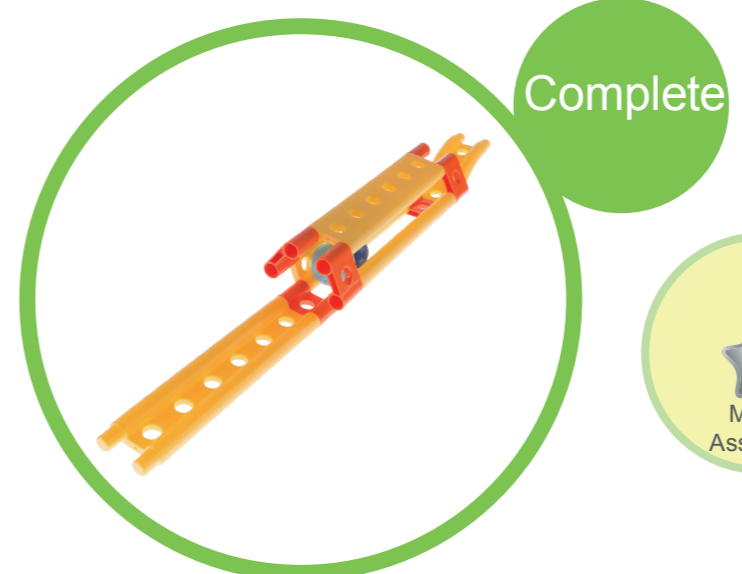
 x4
- 15

 x1
- 29

 x6
- 40

 x1
- 41

 x1



- 1

- 2

- 3

- 4




Evaluation

- 1

 Model Assembly
- 2

 Activity
- 3

 Sharing

Activity Try to roll a ball on the model and see how high it would fly.

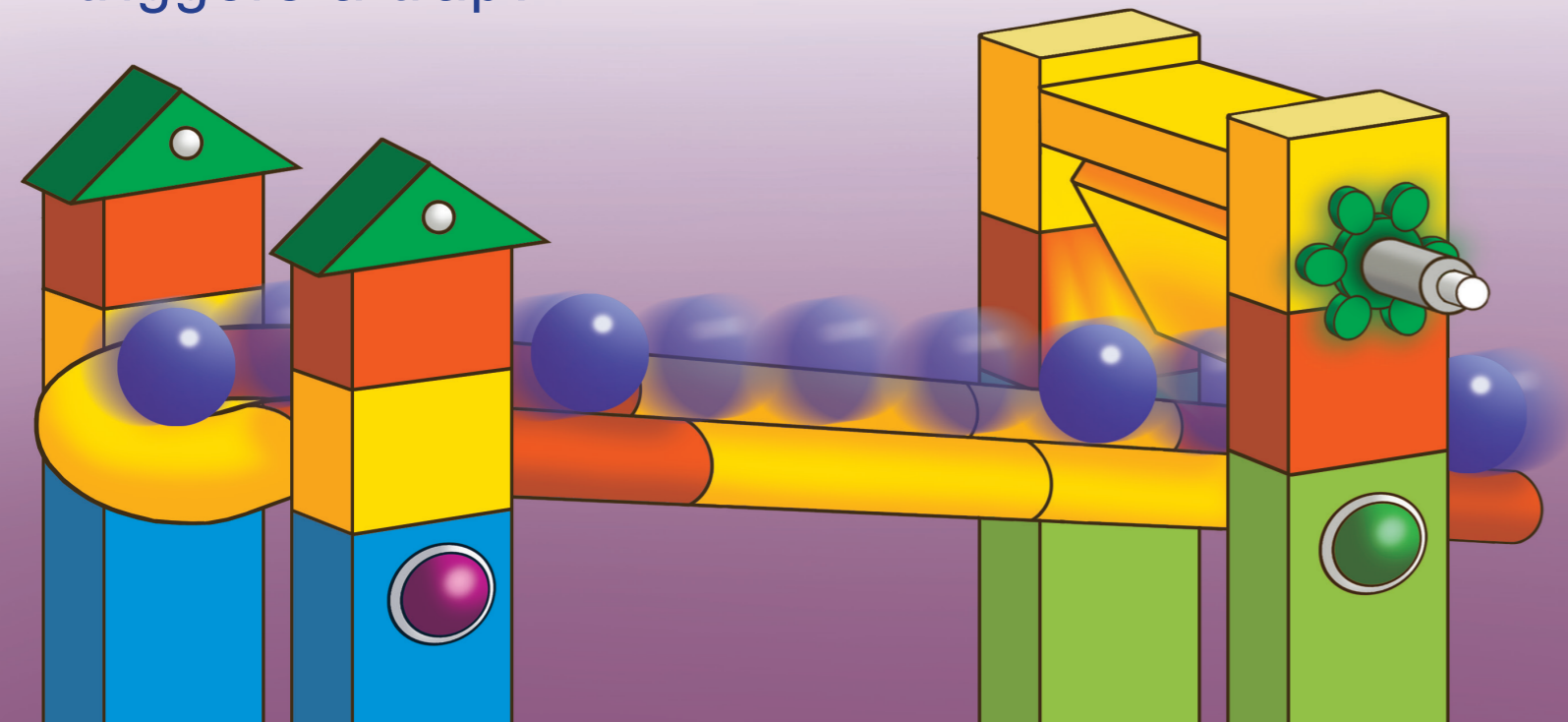


Session 19

Trap Track



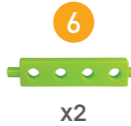












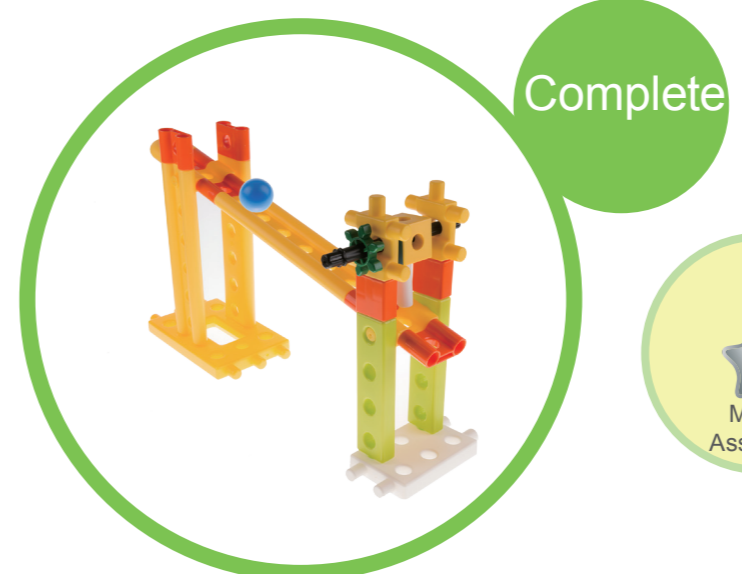
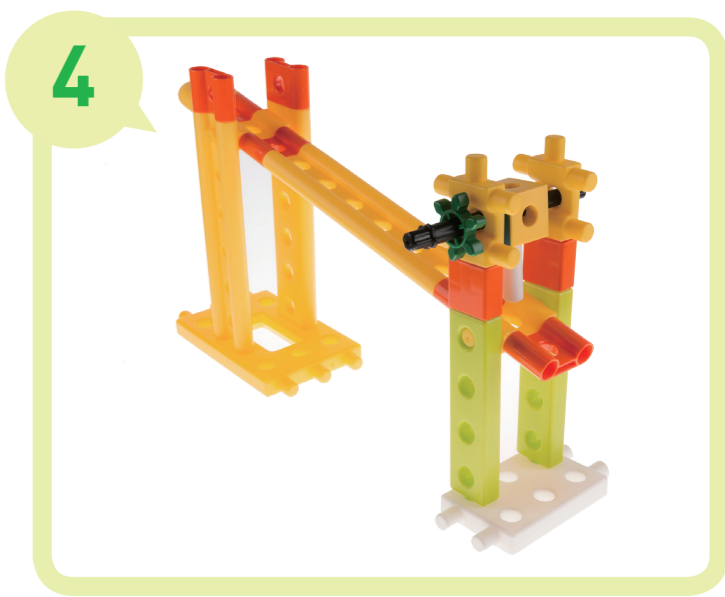
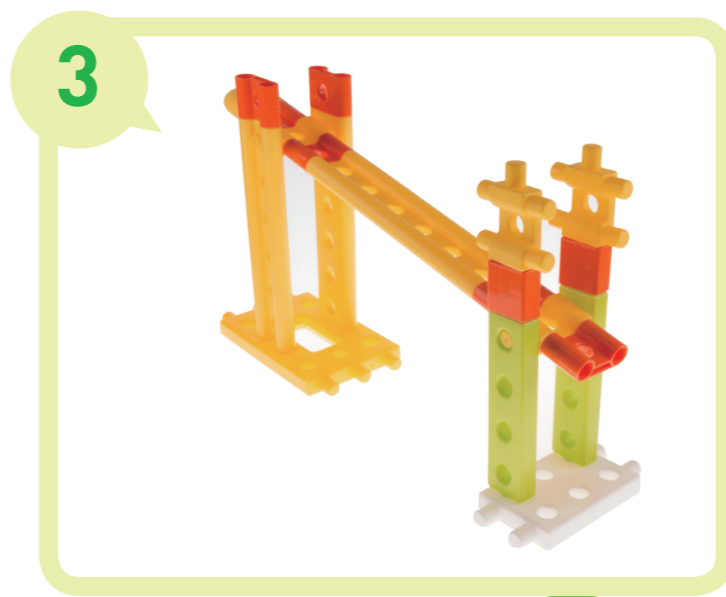
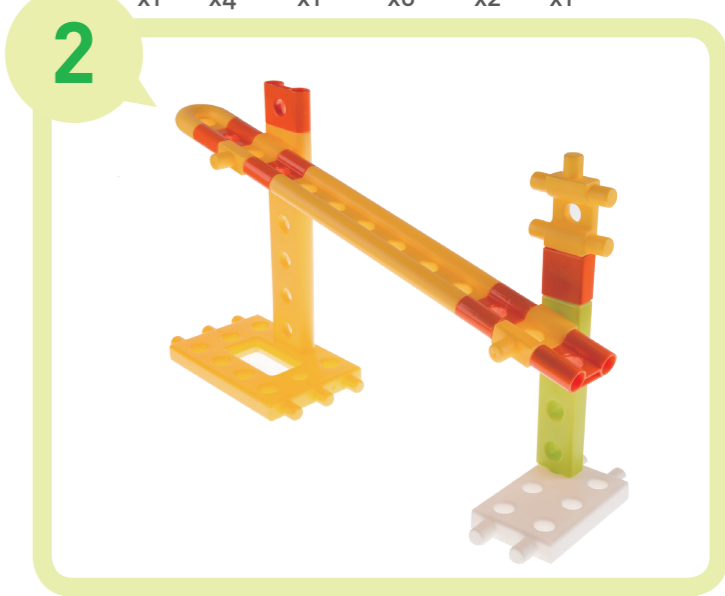
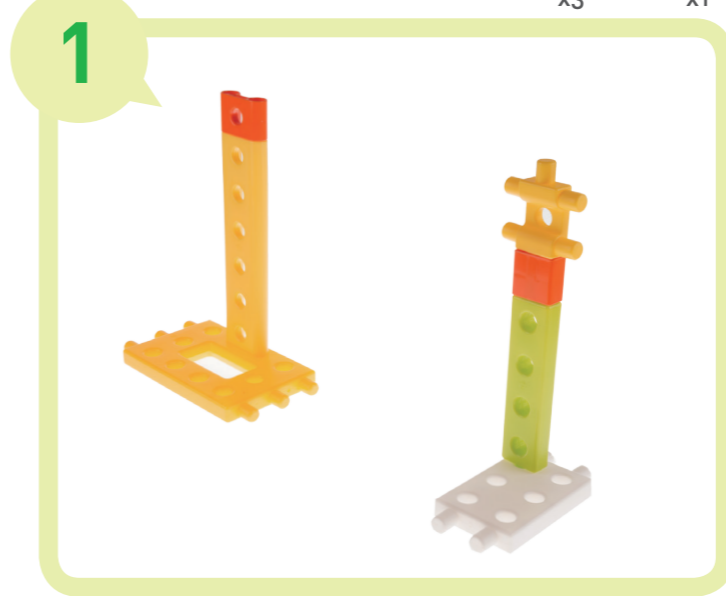
Isn't it interesting when a ball rolls down and triggers a trap?



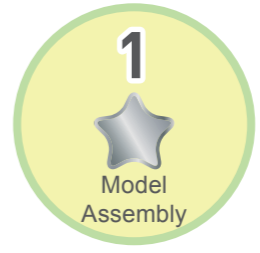
Assembly Steps

Parts List

- | | | | | |
|--|--|--|--|--|
|  1
x1 |  2
x1 |  6
x2 |  9
x1 |  13
x1 |
|  14
x3 |  20
x1 |  24
x1 |  25
x4 |  26
x1 |
| | |  29
x6 |  31
x2 |  41
x1 |



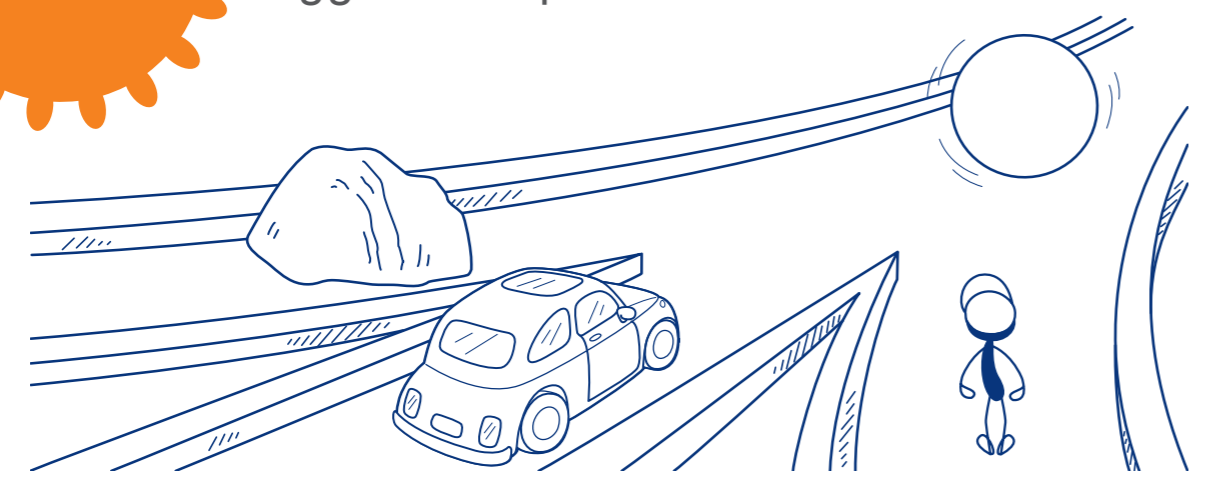
Complete



Evaluation

Activity

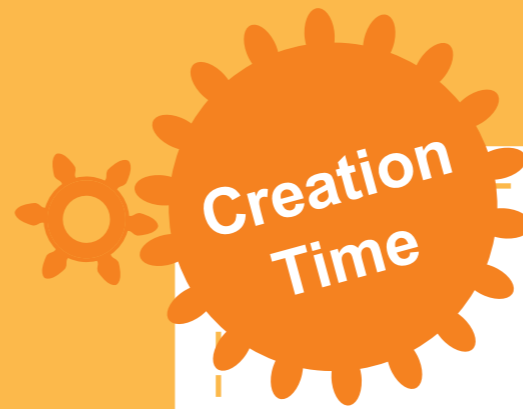
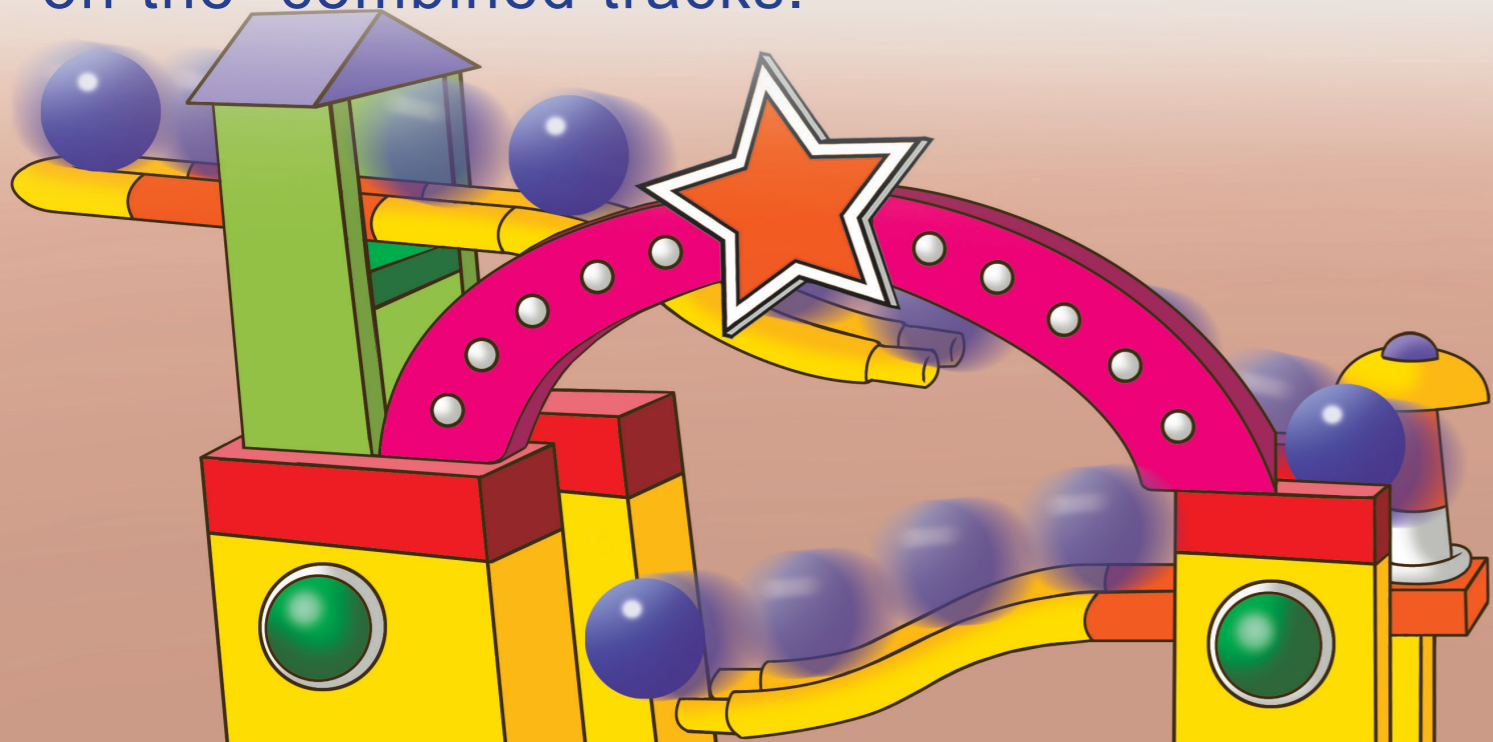
Is there any difference if you replace the triggered trap with another?



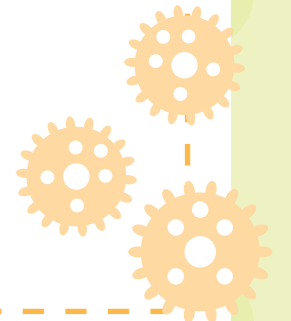
Session 20

Creation Contest - Ball Track

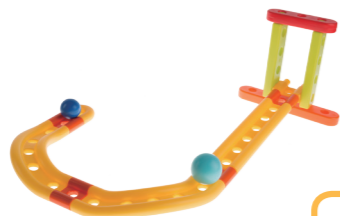
It is really fun when the ball rolls up and down on the combined tracks.



Try to build a track with three layers and see whose ball would reach the destination first.



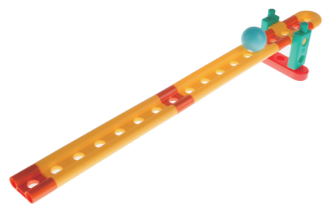
17. Track Curve



19. Trap Track



16. Moving Straight



18. Tunnel



My Artwork



1



Model Design

2



Model Creation

3



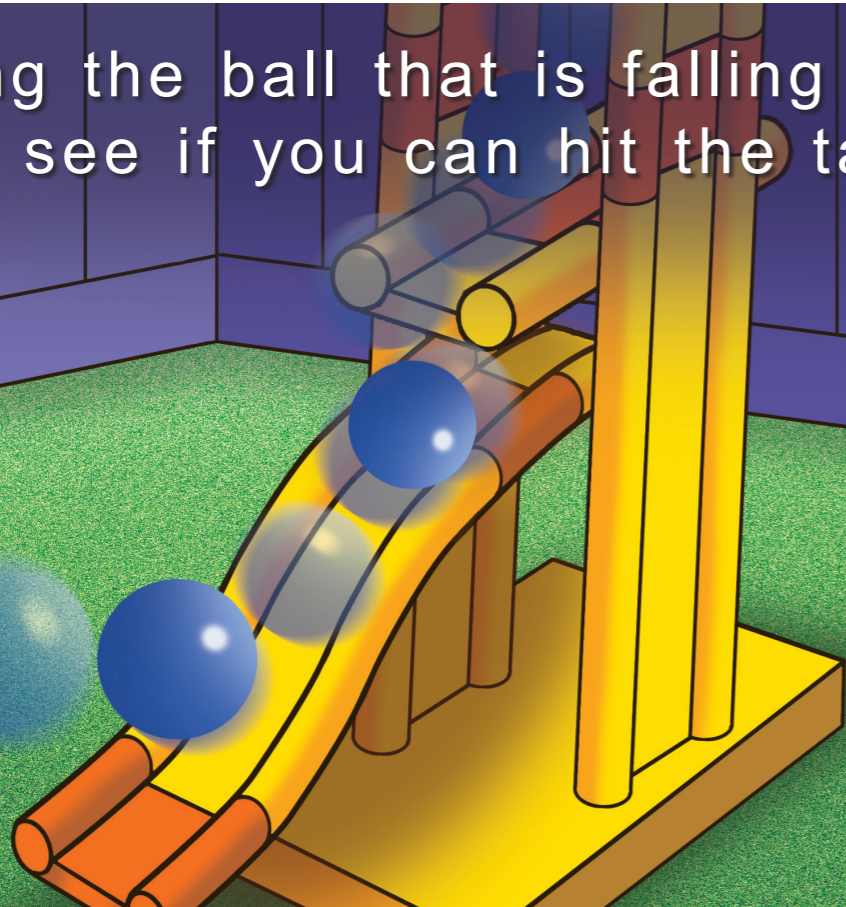
競 廣 獲 勝

Session 21

Aim & Hit

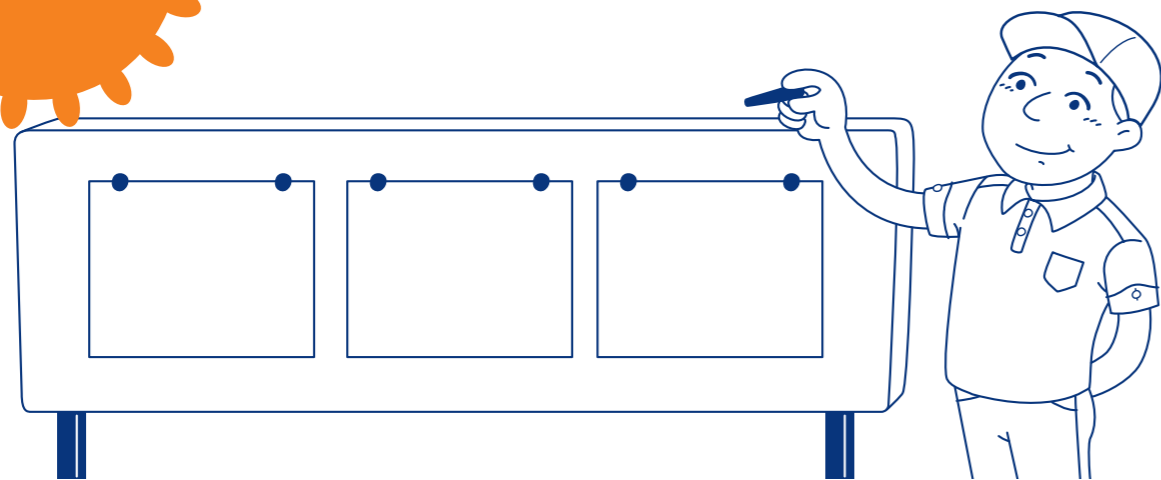
Learning Subject
Gravity,
Fine motor skills

While dropping the ball that is falling from a high place, see if you can hit the target accurately.



Activity

Try and see if you can hit the target successfully for three consecutive times!



Assembly Steps

Parts List

x1	x1	x1	x1	x6	
x1	x2	x2	x1	x7	x1



1

2

3

4

完成

1

Model Assembly

2

Activity

3

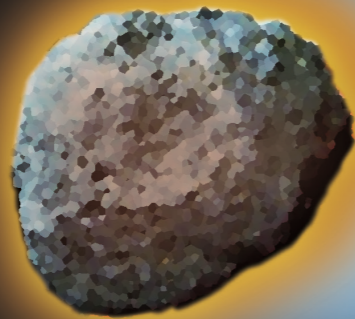
Sharing

Evaluation

Session 22 Meteorite Impact

Learning Subject
Meteorite,
Imagination

What will happen when flying meteorites hit the earth from outer space?



Activity

A large meteorite fell down from the sky and formed a big crater on the ground. See what the path looks like.



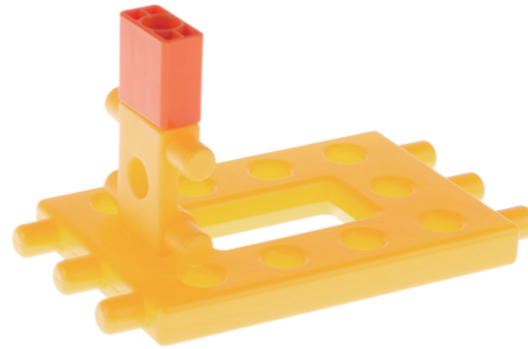
Assembly Steps

Parts List

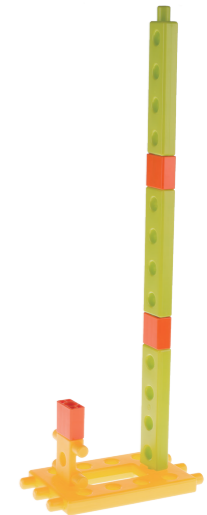
- | | | | | |
|--|--|--|--|--|
|  1
x1 |  6
x3 |  9
x4 |  13
x1 |  14
x4 |
|  23
x1 |  25
x1 |  29
x4 |  31
x3 |  40
x1 |
| | |  41
x1 | | |



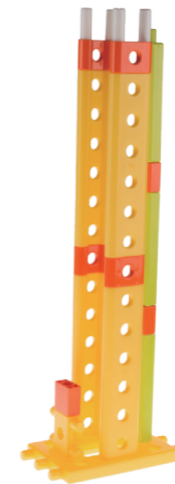
1



2



3



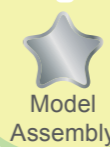
4



Complete



1



2



3



Evaluation

Session 23

Zumanjaro

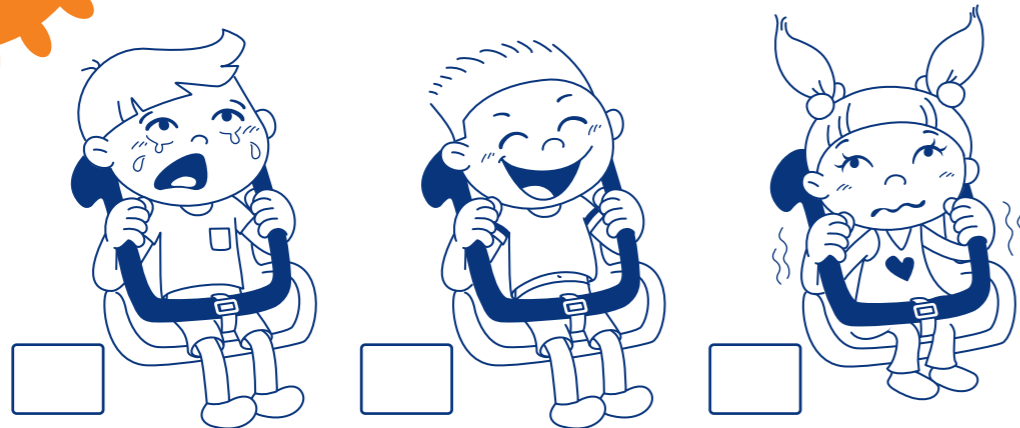
Learning Subject
Amusement park,
Oral expression

Zumanjaro is a very popular amusement park ride that lifts up and reaches a dynamic height before making a sudden drop.



Activity

Which facial expression would you have while riding the Zumanjaro? Share with us your fun experience at the amusement park.



Assembly Steps

Parts List

1 x2	2 x5	4 x2	9 x1	10 x4	13 x1
14 x6	18 x2	20 x2	28 x4	29 x6	39 x1



1

2

3

4

Complete

1

Model Assembly

2

Activity

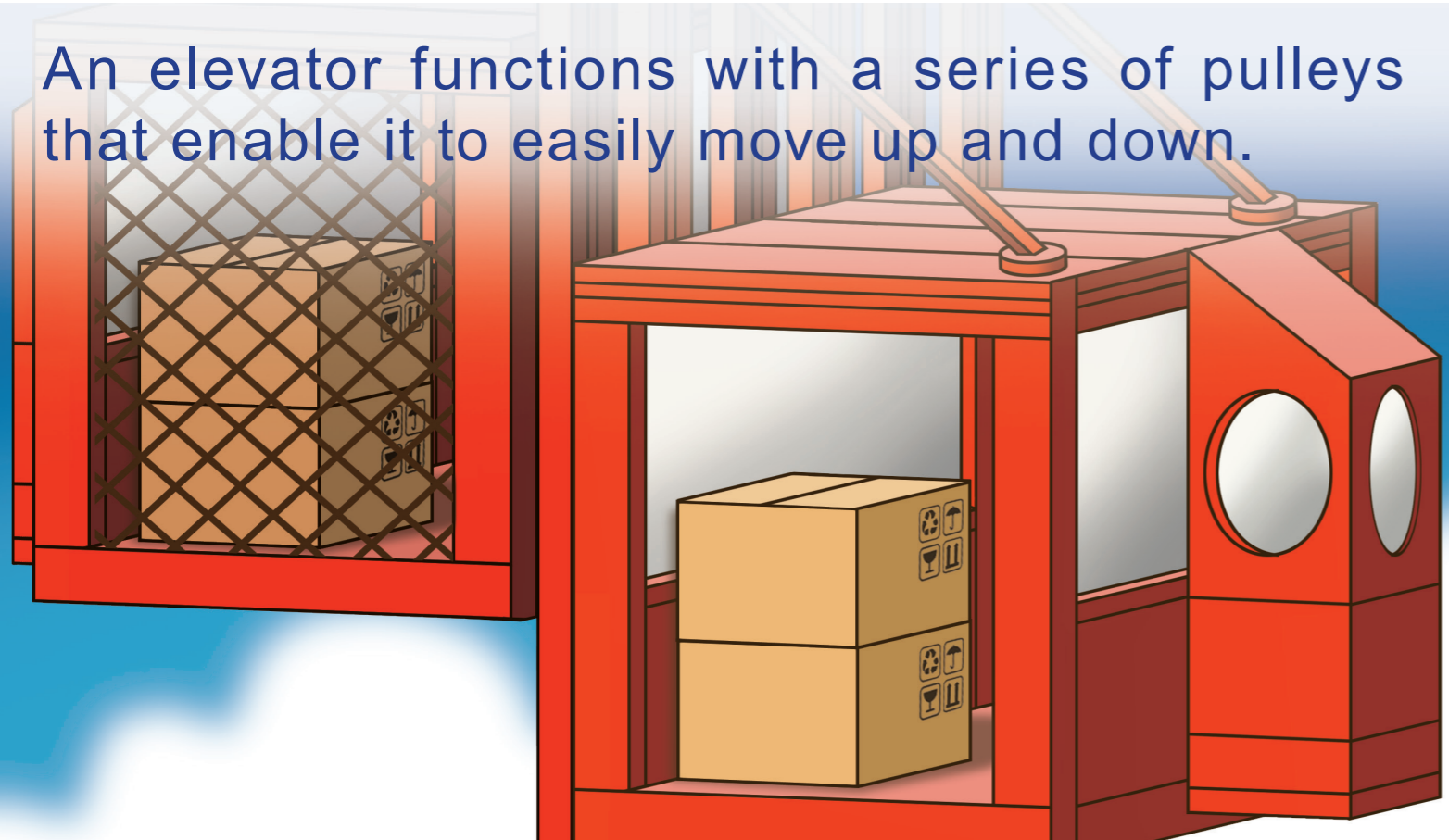
3

Sharing

Evaluation

Session 24 Elevator

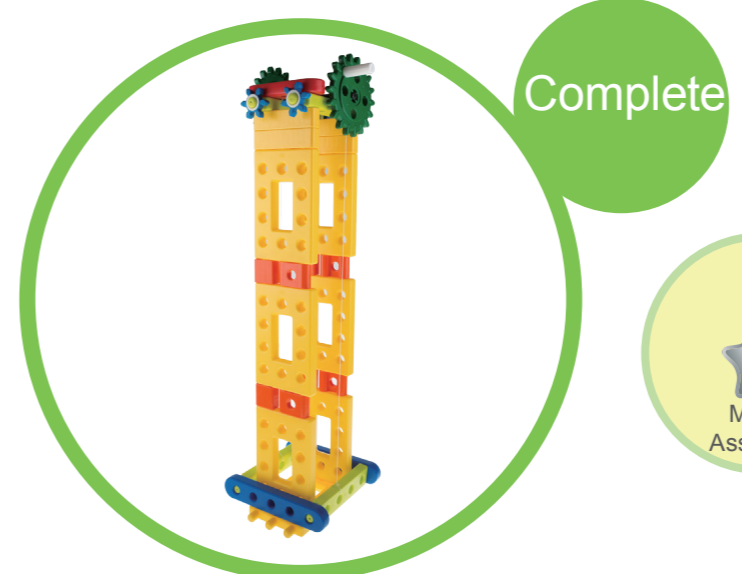
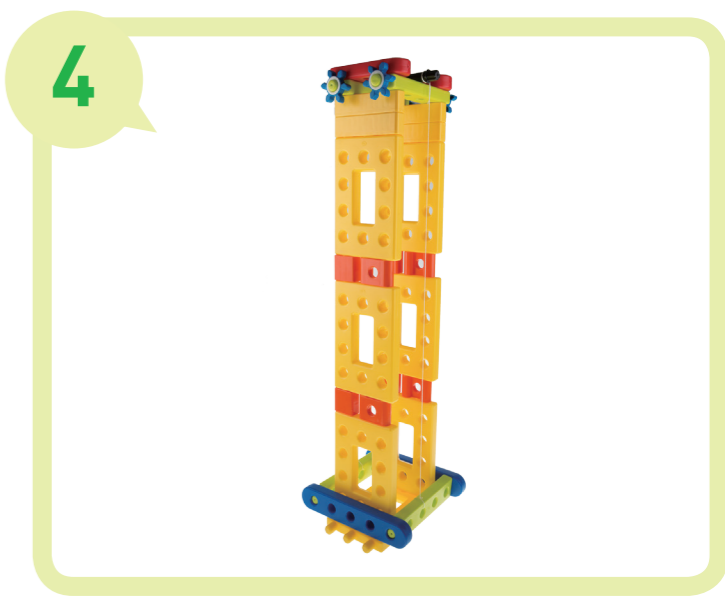
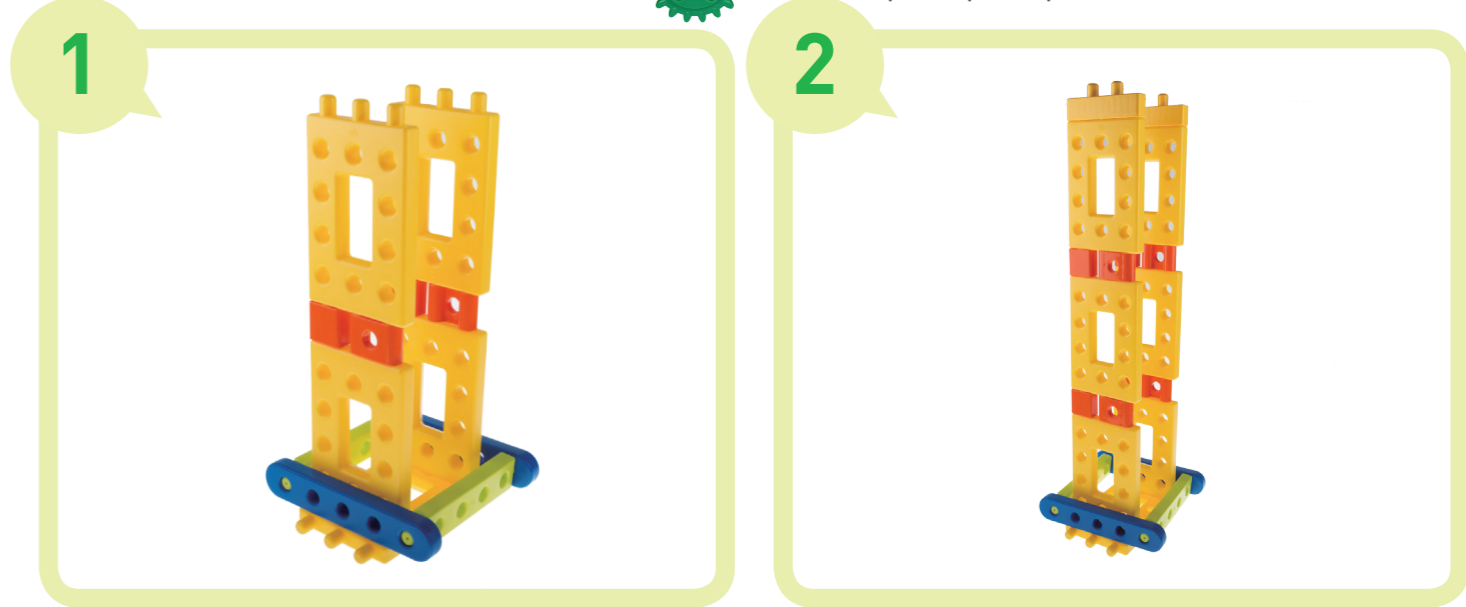
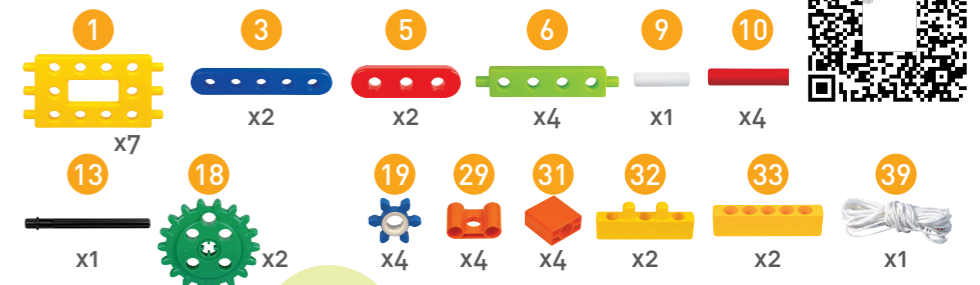
Learning Subject
Elevator, Problem-solving skills



An elevator functions with a series of pulleys that enable it to easily move up and down.

Assembly Steps

Parts List



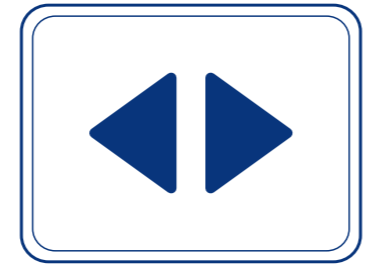
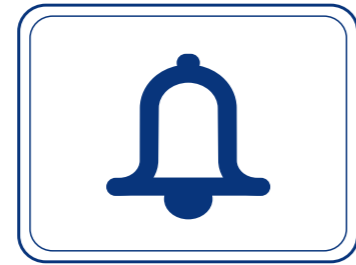
Complete



Evaluation

Activity

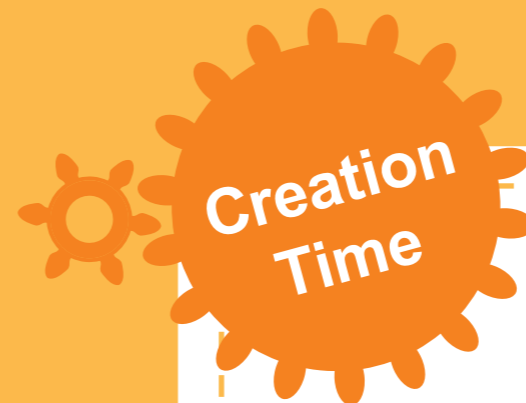
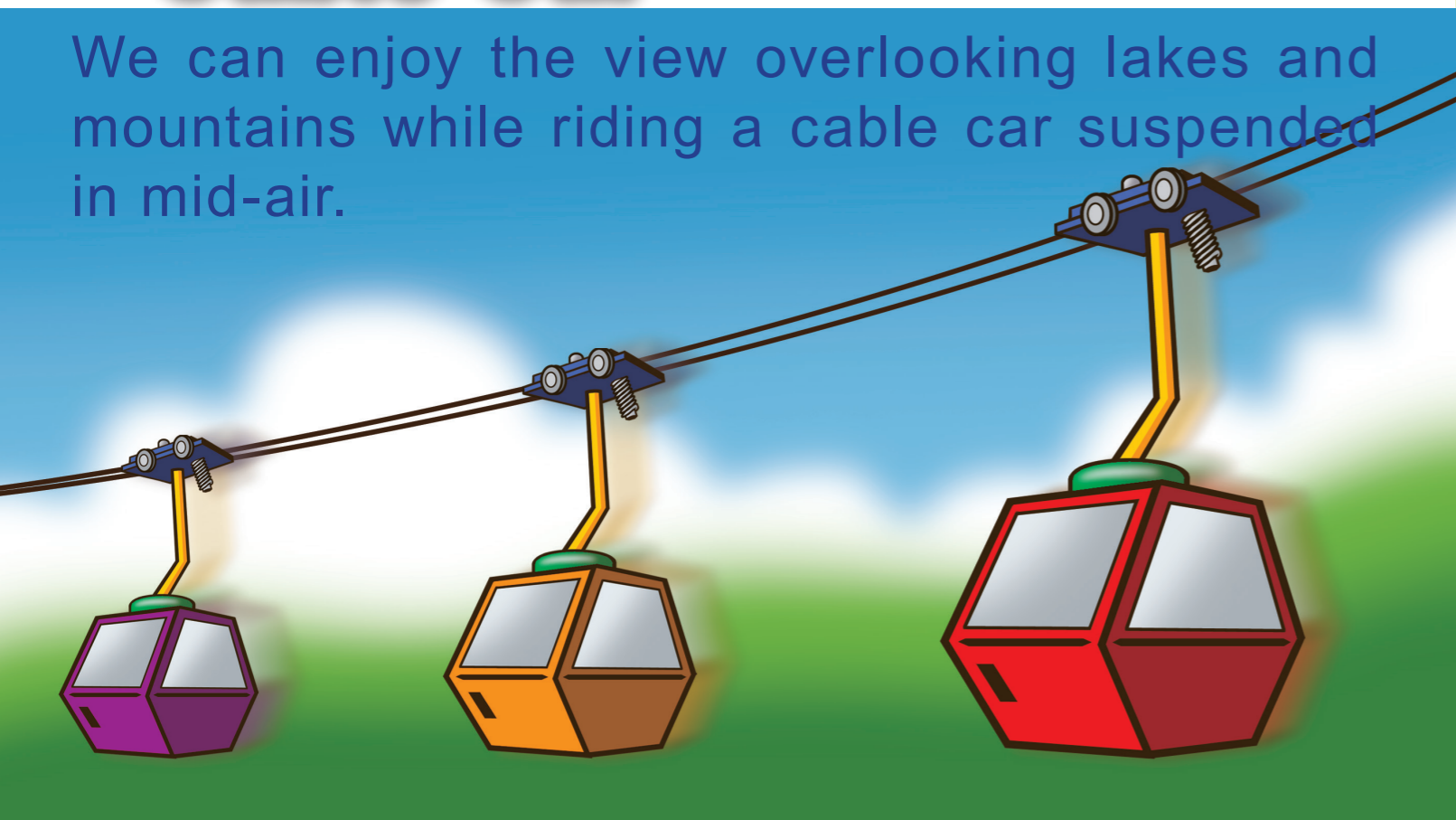
Which button in the elevator is used for emergency?



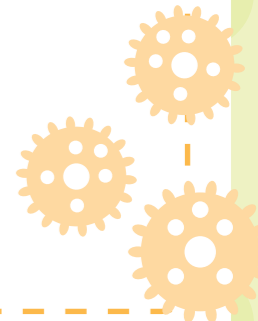
Session 25

Creation Contest - Cable Car

We can enjoy the view overlooking lakes and mountains while riding a cable car suspended in mid-air.



Have you ever ridden a cable car? Use the building blocks to make one so it can take us sightseeing.

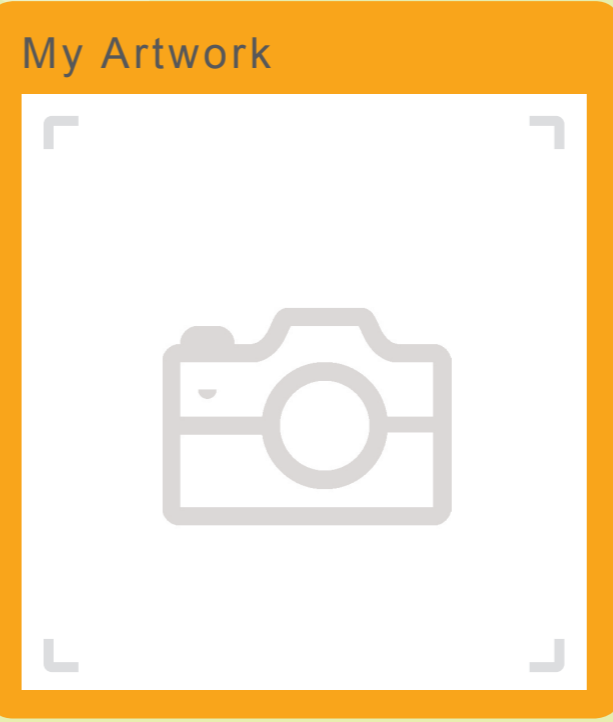


22. Meteorite Impact

24. Elevator

21. Aim & Hit

23. Zumanjaro



Evaluation

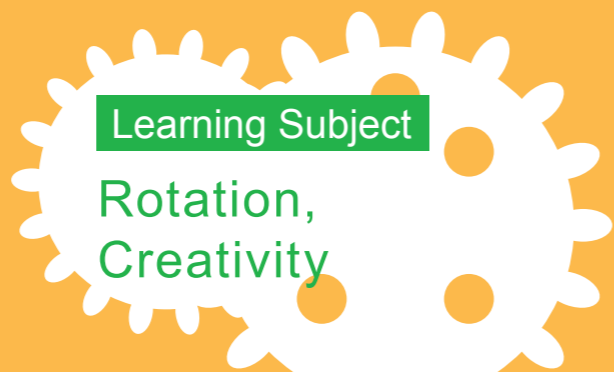
1
★
Model Design

2
★
Model Creation

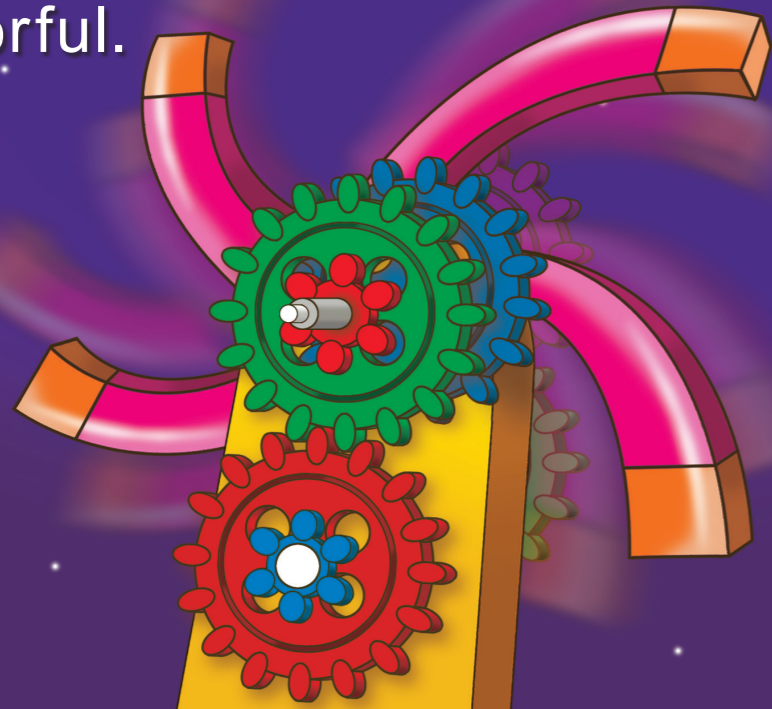
3
★
Winner!

Session 26

Carousel Float

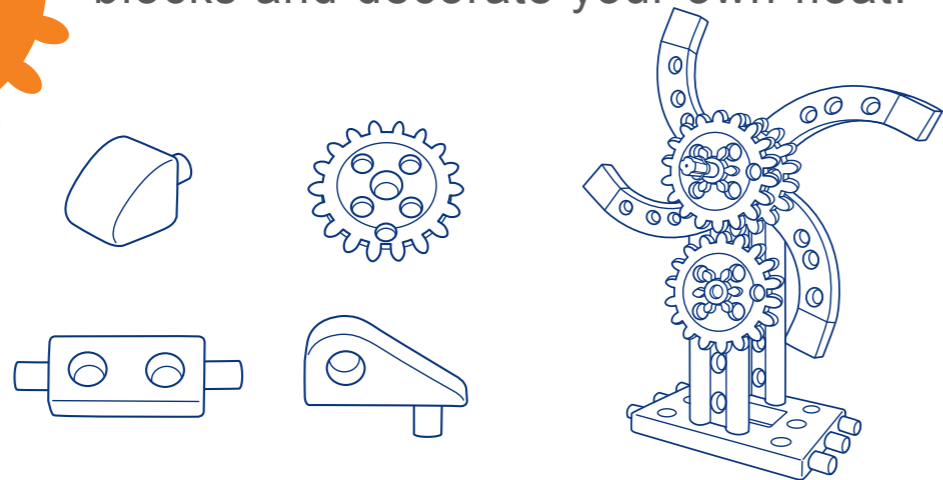


With so many beautiful decorations, the rotating blades on the carousel float look interesting and colorful.



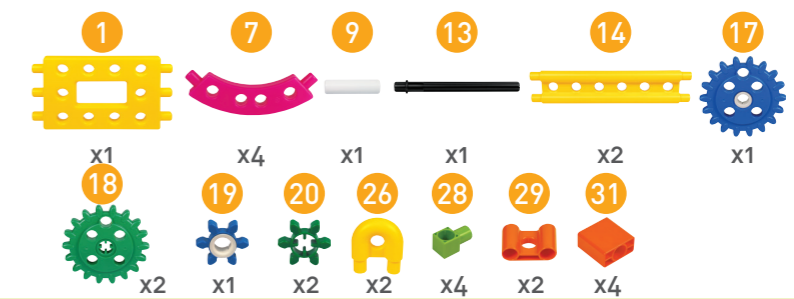
Activity

Please choose two types of building blocks and decorate your own float.



Assembly Steps

Parts List



1



2



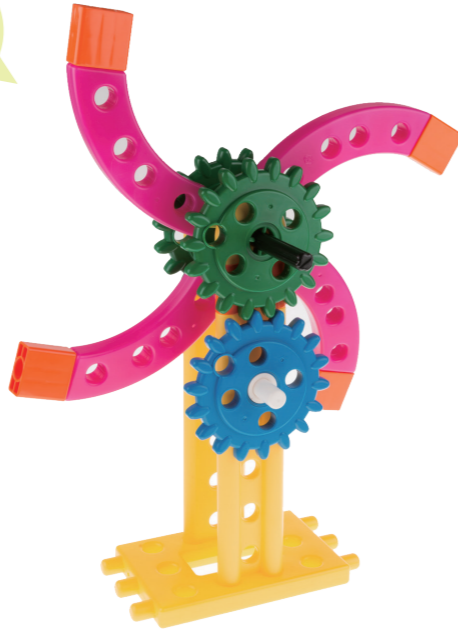
3



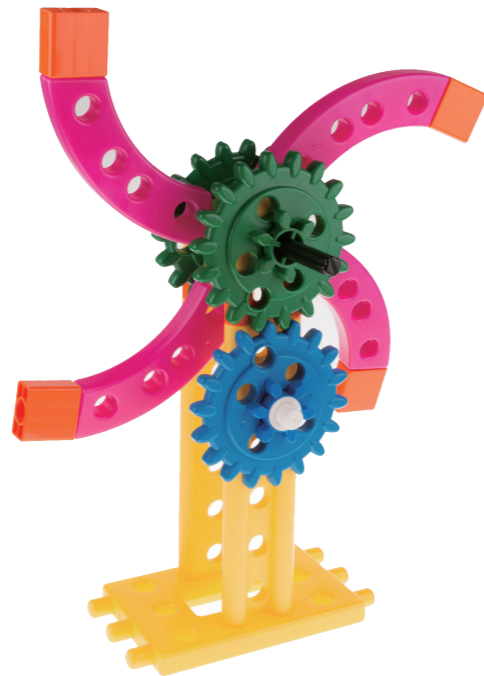
4



5



6



Complete

1



Model Assembly

2



Activity

3



Sharing

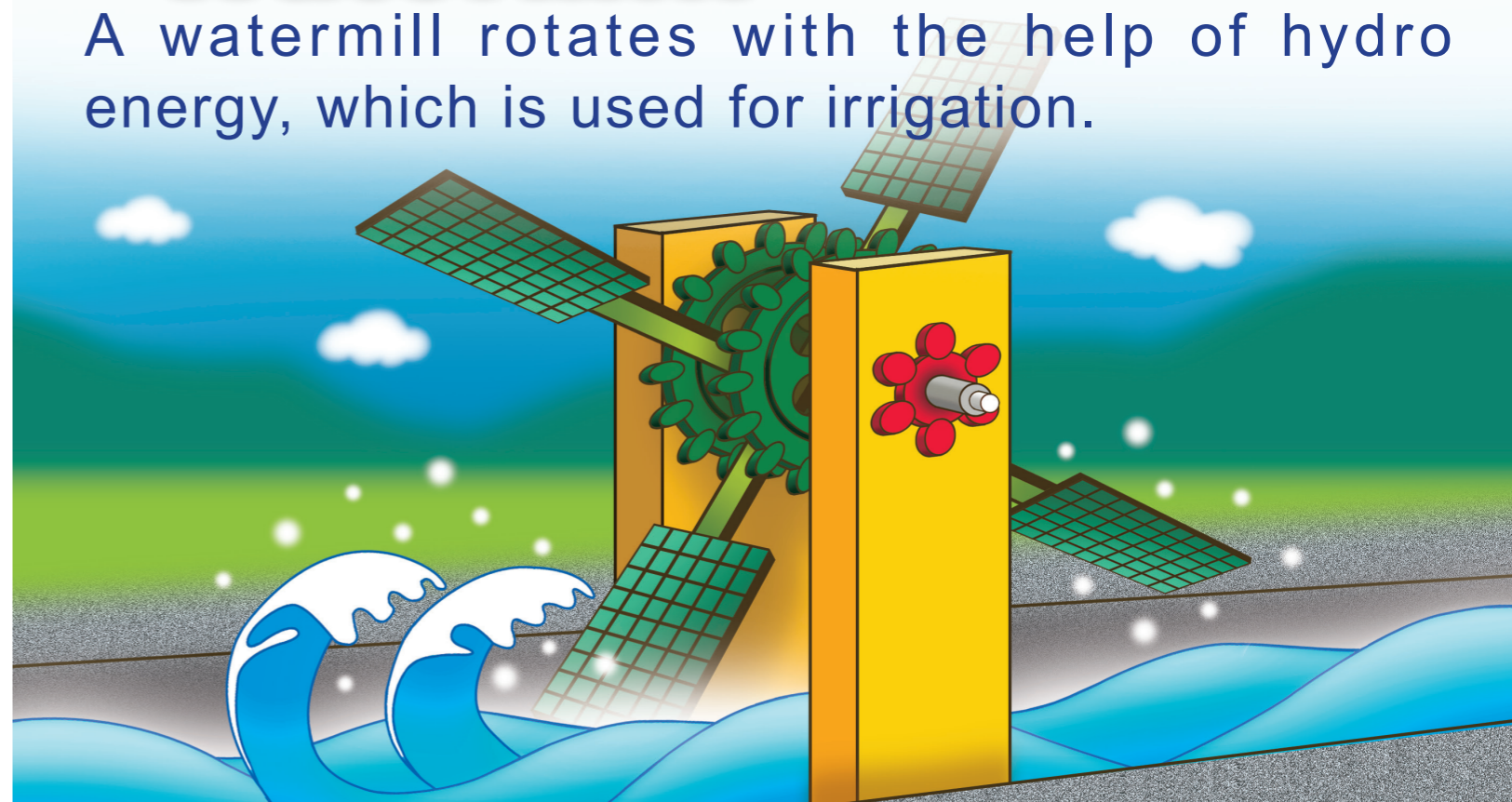
Evaluation

Session 27

Four-blade Watermill

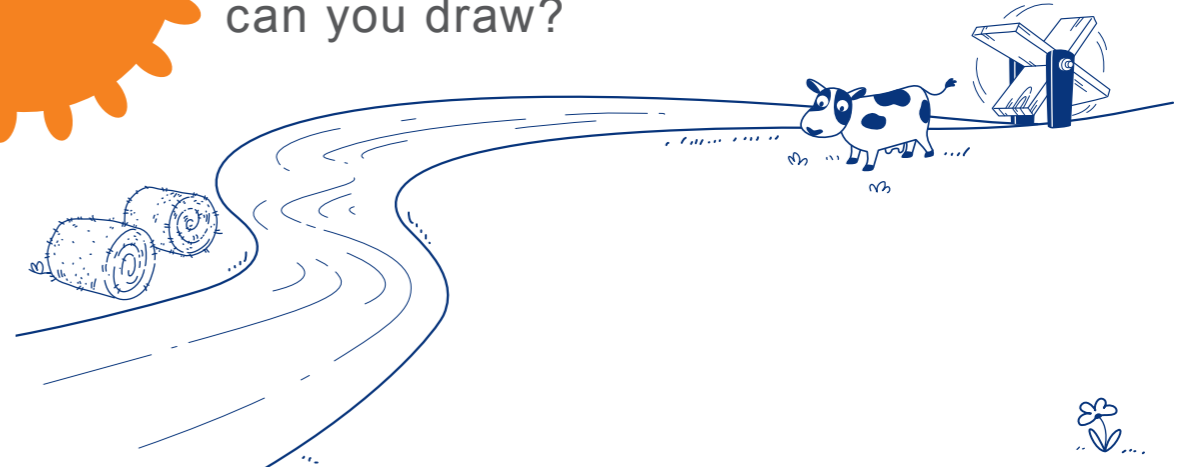
Learning Subject
Watermill;
Associative ability

A watermill rotates with the help of hydro energy, which is used for irrigation.



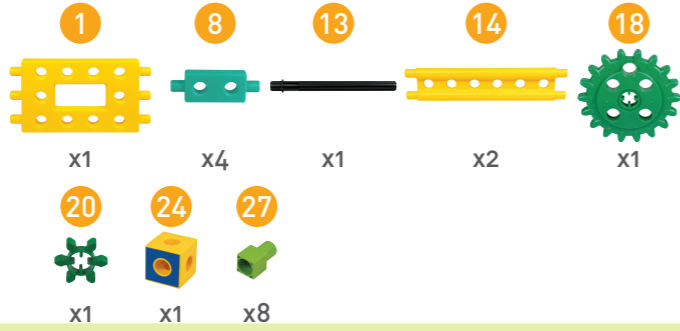
Activity

There are a variety of animals around the watermill at the ranch. How many kinds can you draw?



Assembly Steps

Parts List



1

2

3

4

5

6

7

8

Complete

1

Model Assembly

2

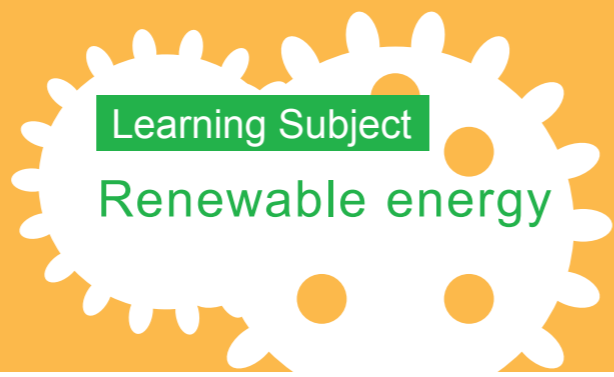
Activity

3

Sharing

Evaluation

Session 28 Dutch Windmill

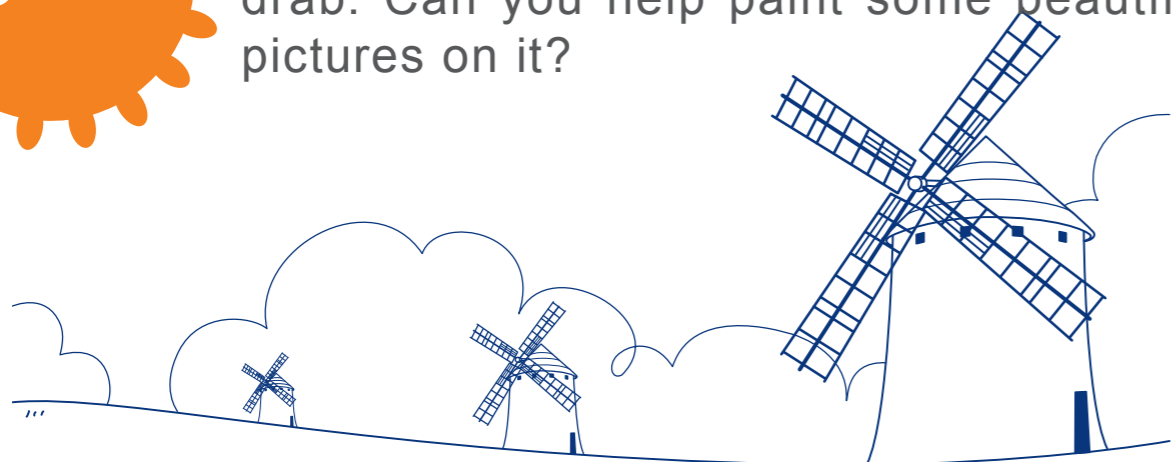


Holland is famous for its windmills used to generate electricity, which is a clean energy application.



Activity

The windmill pedestal looks a little drab. Can you help paint some beautiful pictures on it?



Parts List

1	5	6	10	13	18
x2	x2	x4	x4	x1	x2
19	22	28	31	32	33
x2	x2	x8	x4	x4	x2



1

2

3

4

5

6

7



8



9



10



11



Complete

1



Model Assembly

2



Activity

3



Sharing

Evaluation

Session 29

Lottery Machine

Learning Subject

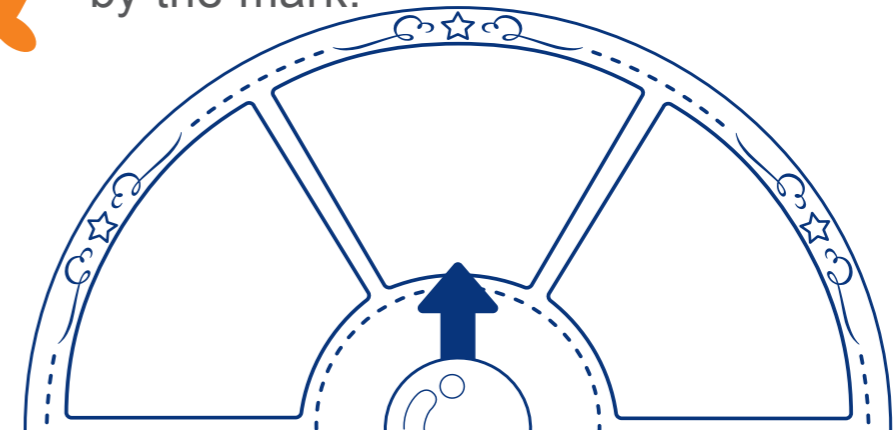
Rotation, Fine motor skills

The lottery machine turns round and round, which is really nerve-racking. Let's see which ball number would appear.



Activity

Put a mark on the lottery machine and rotate it three times. Draw the pictures indicated by the mark.



Assembly Steps

Parts List

x2	x1	x2	x3	x4	x1	x4						
x1	x1	x1	x4	x2	x4	x1	x1	x1	x4	x6	x2	x2

1

2

3

4

5

6

7

8

9

Complete

1

Model Assembly

2

Activity

3

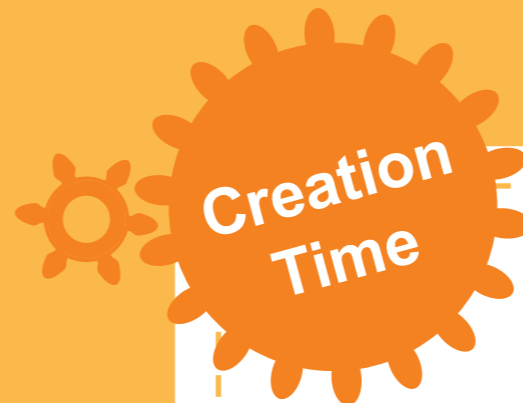
Sharing

Evaluation

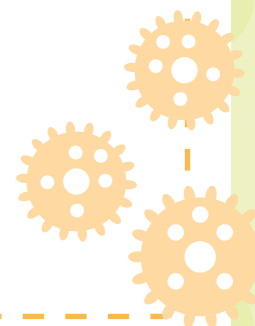
Session 30

Creation Contest - Ferris Wheel

The ferris wheel can take us high above the sky to enjoy the view.



There are many passenger cars on the Ferris wheel. Can you make a rotating Ferris wheel?



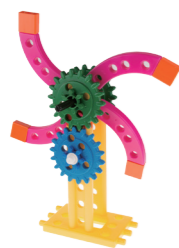
27. Four-blade Watermill



29. Lottery Machine



26. Carousel Float



28. Dutch Windmill



My Artwork



1



Model Design

2



Model Creation

3



Winner!

Creative World

- 1 #1230 Wonderful World 2 #1231 Theme Park



- 3 #1232 Little Artist 4 #1233 Fun Cube



30 mins/ session; 30 sessions/ package

Technology Explorer

- #1244 Robot #1245 Vibro & Gyro



- 17 #1246 Programmable Controller 18 #1247 S4A Interactive Bricks



50 mins/ session; 20 sessions/ package

Brick Contraption

- #1248 Basic Set #1249 Construction Set



40 mins/ session; 20 sessions/ package

Scientific Experiment

- 5 #1234 Force & Simple Machine 6 #1235 Motion & Mechanism



- 7 #1236 Electricity & Circuit 8 #1237 Electromagnetism & Motor



- 9 #1238 Gas & Pneumatics 10 #1239 Wind Power



- 11 #1240 Light & Solar Energy 12 #1241 Liquid & Hydraulics



- 13 #1242 Chemical Battery 14 #1243 Optical Devices



40 mins/ session; 20 sessions/ package



Creative Classroom

#1250 Creative World Set



Target: age 2-6 (Kindergarten)
30 mins/ session;
120 sessions in total

#1251 Scientific Experiment Set- Power Machine



Target: age 7+ (Elementary School)
40 mins/ session;
100 sessions in total

#1254 Brick Contraption Set



#1252 Scientific Experiment Set- Green Energy

Target: age 7+ (Elementary School)
40 mins/ session;
40 sessions in total

#1253 Technology Explorer Set



Target: age 7+ (Elementary School)
40 mins/ session;
100 sessions in total



Target: age 10+ (Jr. & Sr. High School)
50 mins/ session;
80 sessions in total