

# Crab

## Applicable Age Group

6+

## Activity Objectives

- ✓ Understand vertical gears and complete the design of gear transmission groups through vertical transmission
- ✓ Master the connecting rod structure and know that this structure has three or more rods connected together for mutual rotation
- ✓ Understand the external characteristics and living habits of crabs

## Activity Description

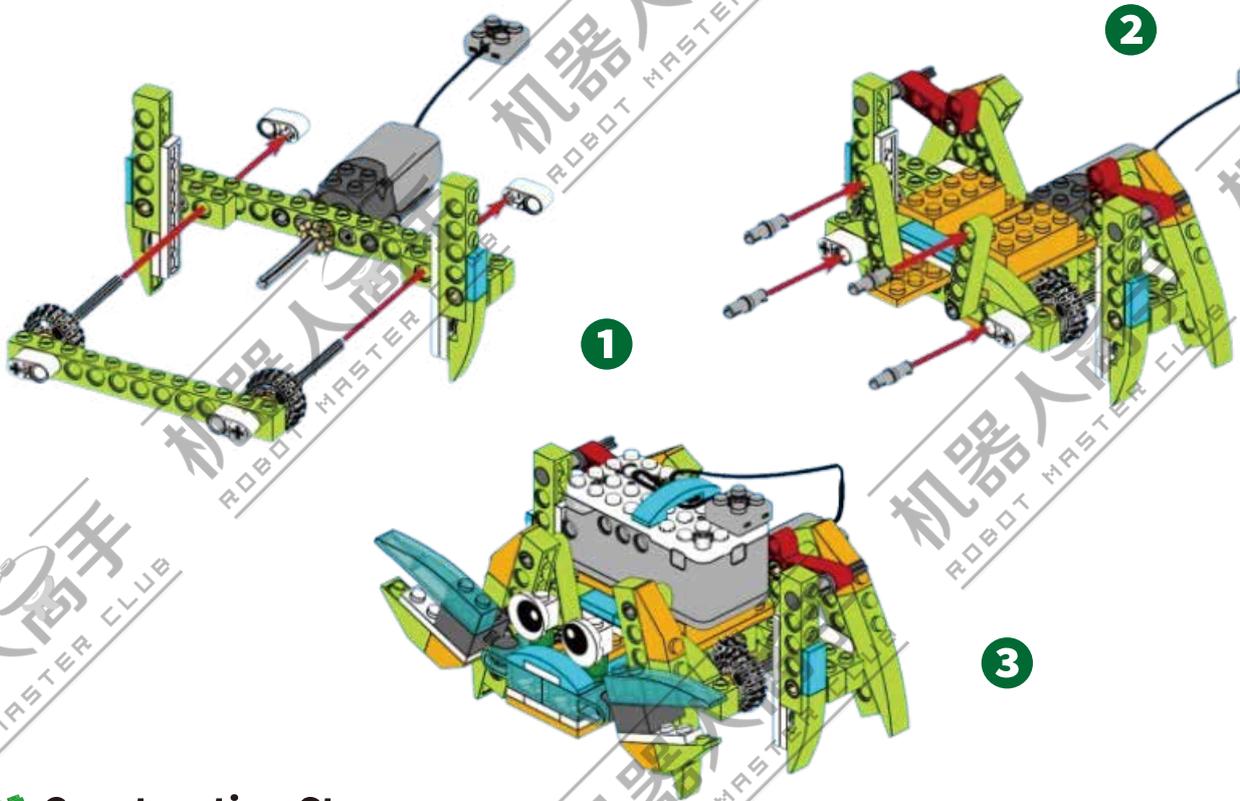
In this course, children will design a large crocodile based on belt transmission.

## STEAM Literacy Development Indicators

| Method Indicator                                    | Situation Introduction & Problem Analysis | Using Gear Transmission Groups to Construct a Crab | Testing Structural Stability and Smoothness | Understanding the Application of Gear Transmission Groups |
|---|---|--|---|---|
| Curiosity and Imagination                           | ●   |  |   |   |
| Flexibility and Adaptability                        |   | ●  |   |   |
| Verbal and Written Communication Skills             |   |  |   |   |
| Cross-boundary Cooperation and Exemplary Leadership |   |  |   |   |
| Critical Thinking and Problem-solving Skills        |   |  | ●   |   |
| Proactive and Pioneering Spirit                     |   |  |   | ●   |
| Ability to Evaluate and Analyze Information         |   |  |   |   |

## Building Block List

|  |     |  |     |  |     |  |     |
|--|-----|--|-----|--|-----|--|-----|
|  | X 6 |  | X 2 |  | X 4 |  | X 4 |
|  | X 3 |  | X 1 |  | X 2 |  | X 2 |
|  | X 2 |  | X 2 |  | X 4 |  | X 2 |
|  | X 3 |  | X 2 |  | X 1 |  | X 2 |
|  | X 4 |  | X 4 |  | X 1 |  | X 2 |
|  | X 2 |  | X 8 |  | X 4 |  | X 2 |
|  | X 1 |  | X 4 |  | X 2 |  | X 2 |
|  | X 2 |  | X 3 |  | X 2 |  | X 2 |
|  | X 2 |  | X 2 |  | X 4 |  | X 1 |
|  | X 2 |  | X 4 |  | X 2 |  | X 1 |
|  | X 1 |  | X 2 |  | X 2 |  |     |
|  | X 2 |  | X 4 |  | X 2 |  |     |



## Construction Steps

Makerzoid(App)-Robot Master(Kit)-Soccer Competition(Set)-7 Electric Animal-5 Crab (Electric)