

## <2021 KIYO 4i Elementary School Level>

**“ Is there any sports(play) that can be safely enjoyed at home even in situations like Corona-19?”**

### <Helpful Information>

The prolonged COVID-19 situation is creating new trends in various fields of our society, such as a surge in online consumption, drive-through, smart order, avoiding indoor sports facilities, and increases in demand for home training.

The online education services for children who cannot go to school are increasing rapidly, and difficulties in activities with large numbers of people have arisen, non-audience games are being implemented in various sports events, and many competitions that have been played only offline are now being held on an online basis.

Meanwhile, students are staying home much longer, they were unable to get along with their friends and have become limited in social activities, leading to a new problem of increasing depression.

In order to overcome this situation, cultural or sports activities performed on a smaller scale with family or close neighbors.

Let's create a play or sports game that can be played safely and enjoyed even in a situation like Corona 19.

### <Task>

1. Let's investigate the problems of people staying at home due to COVID-19 around us.
2. Among the problems investigated, Let's find the specific methods or ideas that can be solved or improved.  
(Additional points will be given if your team make creative invention ideas in the process.)
3. Let's find a way to spread the idea or solution that your team has devised to solve the problem, not only in your own village but to other regions or countries.

## <2021 KIYO 4i Middle School Level>

**“Is there any way to save energy at school? ”**



### <Helpful Information>

Energy efficiency refers to how much energy is being lost in the process of energy conversion.

Since, the amount of energy resources we can use is fixed, we need to save energy by increasing energy efficiency. Besides using energy-efficient appliances, how can you reduce energy being wasted in schools?

In school, there is a lot of energy used unknowingly and uselessly. For example, there are many cases of wasting energy, such as an air conditioner running in an empty classroom, or a toilet water being turned while not being used.

So, how can schools save energy, and how can the energy-saving costs be reinvested in education?

What are the cases of wasting energy in schools, and how do we solve this problem?

### <Task>

1. Investigate where energy is being wasted in the current school, and look for problems.
2. Find specific methods or ideas that can be solved or improved some of the problems you investigated.  
(Additional points will be given if your team make creative invention ideas in the process.)
3. Find ways to spread the ideas or solutions your team has devised to solve the problem not only in your own school, but also to outside of school or in the community.

## <2021 KIYO 4i High School Level>

**“Can we change the future with our behavior-changing inventions?”**

### <Helpful Information>

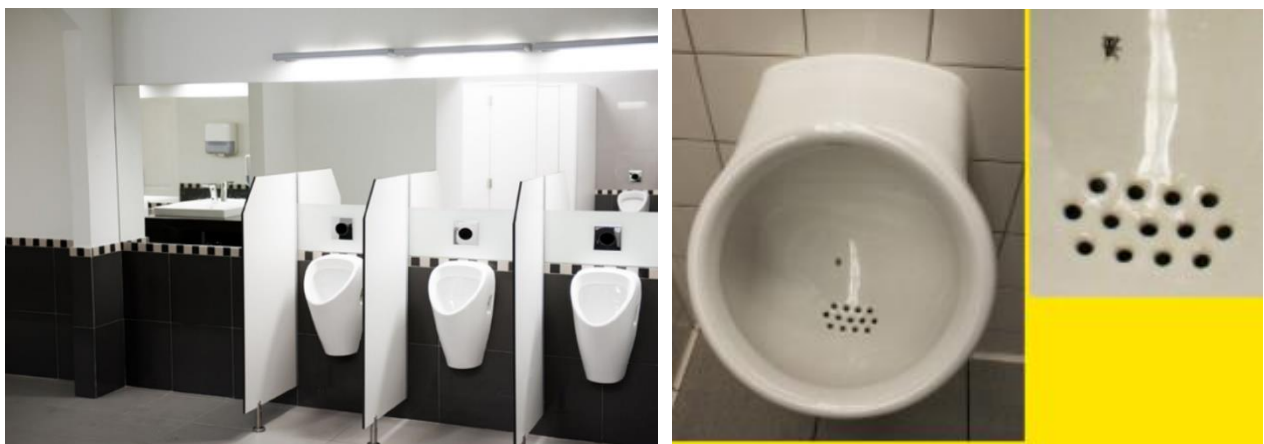
Professor Richard Sailor of the University of Chicago was selected as the recipient of 2017 Nobel Prize in Economics.

He won the Nobel Prize because of the ‘Nudge’ theory, which is already well known as published in the book. The word “Nudge” means a strategy that induces action by poking, and to draw attention.

The professor used the term ‘Nudge’ to mean a gentle intervention that induces the choices of others.

It is a technique that induces better choices, but does not infringe on freedom of choice by approaching non-forced way.

The nudge theory aims to ‘induce human choice’.



Currently, it is mainly used in the field of campaigns or public relations policies.

One of the best example is the idea of drawing a fly on a men's urinal toilet.

It was evaluated as a good example of Nudge idea by inducing cleanness while urinating.

### <Task>

1. Let's find and investigate problems that needed to change the behavior of people around us, or identify the problems in the direction of make people happy.
  
2. Using Nudge theory,  
Let's find specific methods or ideas that can solve or improve some of the problems.  
(Additional points will be given if your team make creative invention ideas in the process.)
  
3. Using Nudge theory,  
Let's look for and put into practice the ideas or solutions your team has devised to solve the problem in your own region or country.

## <Solution Guide>

The content to be investigated must be resolved according to the procedure below, and this content must be shown at the time of presentation.

If the team has a different solution, they can proceed that way, too.

### **1. (Identify the problem)**

Let's present problems that can be found in the surroundings and examines how it affects people. Interviews should be conducted to accurately identify these problems.

### **2. (Search for ideas)**

Find various ways to solve the problem.

Come up with as many ideas as possible, but not criticizing those ideas.

### **3. (Selection of solution)**

Trying to find the solutions by choosing the ideas that present the existing and future technology, the most economical and creative method.

Use the drawings in the explanation to help people to understand.

### **4. (Apply)**

Consider whether other problems arise when applied in practice.

Explain your ideas to your friends, family and teachers.

See if there are any new solutions or improvements.