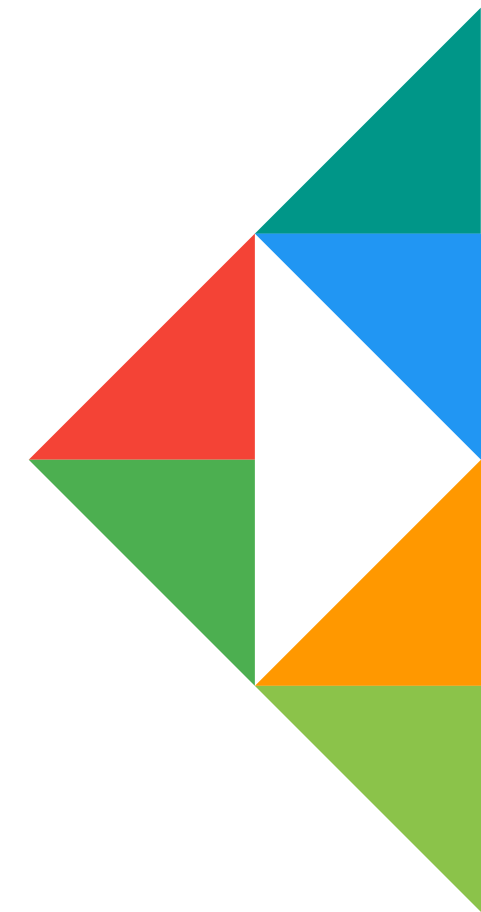


UNITED ARAB EMIRATES  
MINISTRY OF EDUCATION

# The 2018 National Science, Technology and Innovation Festival (NSTIF)

15-19 February 2018  
Festival Arena Dubai

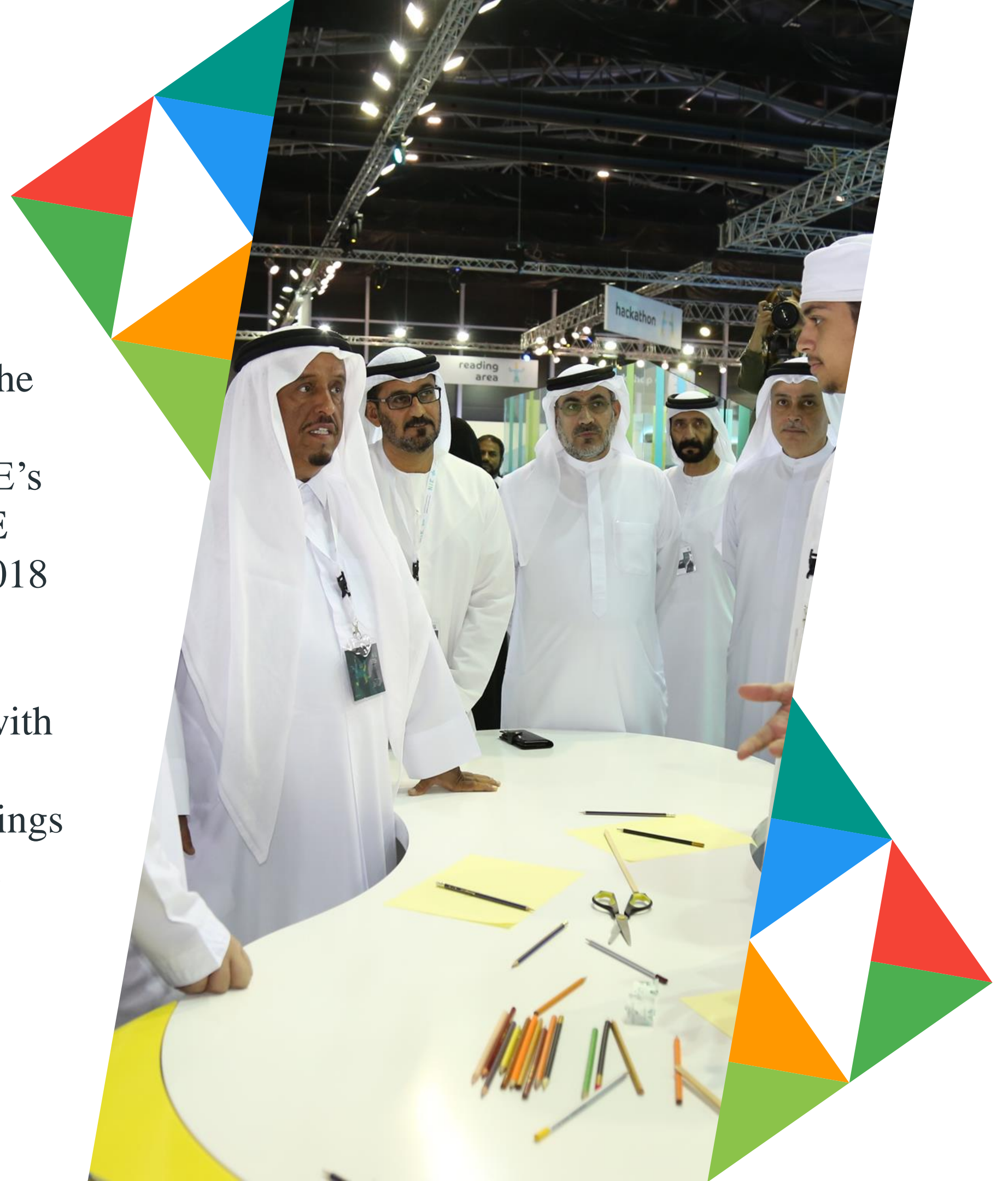




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The Ministry of Education is pleased to announce that the National Science, Technology and Innovation Festival (NSTIF), which is a key initiative that supports the UAE's overall vision, will be held in conjunction with the UAE Innovation Month and running from February 15-19, 2018 at the Festival Arena, Dubai.

The festival is set to attract both students and teachers with its fun environment that fosters a passion for science, technology, innovation and entrepreneurship. NSTIF brings together leading international experts and institutions in science, technology, innovation and entrepreneurship.





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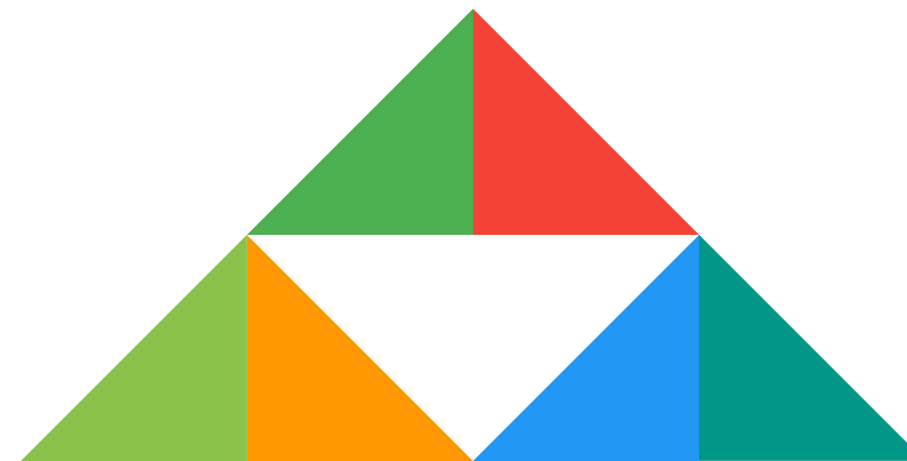
## There are two main Competitions at the Festival: The Science Fair 'My Idea' (Fikrati)

The Science Fair is a platform where students can present the research outcomes of their scientific project and showcase the scientific methodology behind it. The innovative scientific research projects will be evaluated, according to a specialized committee in order to identify the winners.

- **Category 1:** Students in grade 6 to 8
- **Category 2:** Students in grades 9 to 12

“Fikrati” (my idea) gives young elementary students (from Kindergarten to grade 5) the opportunity to present their innovative ideas to qualified specialists in a friendly competitive environment. The students will be evaluated based on the originality of the idea, level of innovation, feasibility of its application, expected value added and much more.

- **Group 1:** Kindergarten students
- **Group 2:** Students in grades 1 to 3
- **Group 3:** Students in grades 4 to 5





# Science Fair Categories

## The Main 4 Areas of Participation:

### **Technology**

This category includes: e.g. communications, electronic systems, robotics, computing, control technology, applications of technology, biotechnology, automation.

### **Biological & Ecological Sciences**

These category includes: agriculture, anatomy, biochemistry, biotechnology, ecology, horticulture, physiology, medical science, veterinary science.

### **Social & Behavioural Sciences**

These category includes: economic, geographical, psychological or sociological studies of human behaviour, nutrition, social anthropology, political science.

### **Chemical, Physical & Mathematical Sciences**

These category includes: chemistry, physics, mathematics, applied mathematics, geology, engineering, computer programming, meteorology, astronomy.





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## The National Science, Technology and Innovation Festival Awards



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## First Competition: The Science Fair

### The Awards of First Competition

<u>The Awards Category</u>	<u># Awardees</u>	<u>Award Value (in Dirhams)</u>
<b>The First Category:</b> The young Scientist Award/The Grand Prize.	1	25,000 for only one winner
<b>The Second Category:</b> 2 Awards for each of the 4 Core Areas. (one for each <b>participating groups</b> ): <ul style="list-style-type: none"> <li>• <b>Group 1:</b> Participants from Grades 6 to 8.</li> <li>• <b>Group 2:</b> Participants from Grades 9 to 12.</li> </ul>	8	4,000 for each winner of the two categories for each of the main core areas: <ul style="list-style-type: none"> <li>-Technology</li> <li>-Biological &amp; Ecological Sciences</li> <li>-Awards, Social &amp; behavioural Science and Chemical</li> <li>-Physical &amp; Mathematical Sciences</li> </ul>
<b>The Third Category:</b>		
STI Awards in 24 different categories	24	2000 for the winner from each category



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## Second Competition: My Idea (Fikrati)

### The Awards of the Second Competition

<u>The Awards Category</u>	<u># Awardees</u>	<u>Award Value (in Dirhams)</u>
The participation for this competition is open to the 3 groups: <b>Group 1:</b> Kindergarten students <b>Group 2:</b> Students in grades 1 to 3 <b>Group 3:</b> Students in grades 4 to 5	3	5,000 for each winner from each group



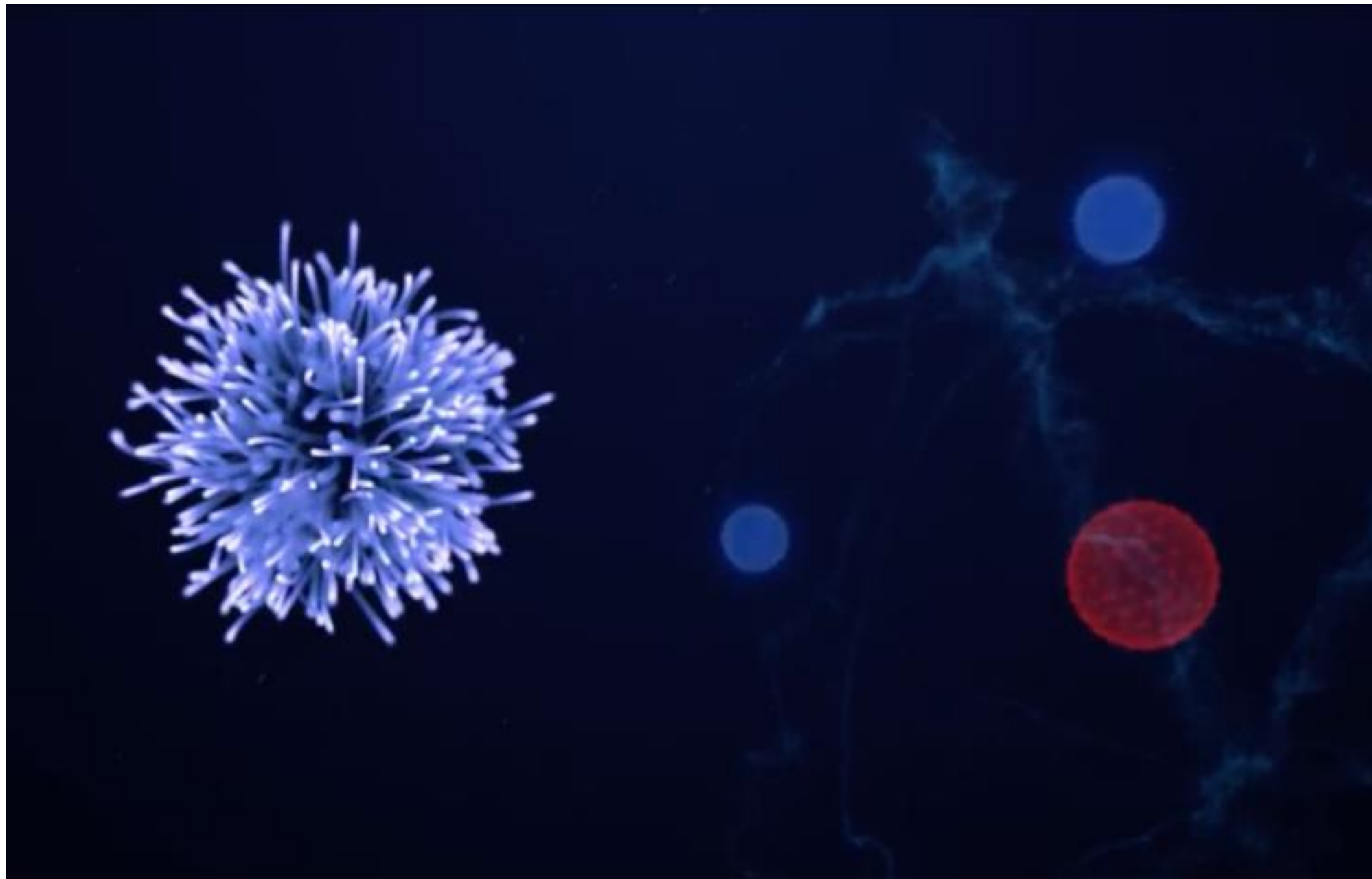


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# NSTI Science Fair/Fikrati Registration



# NSTI Science Fair/Fikrati Registration



To Register for the Science Fair use the following link:

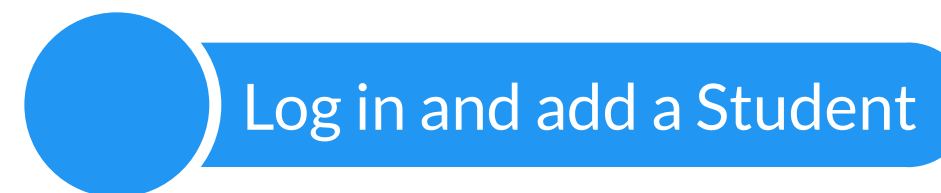
<http://nstifestival.ae/sciencefair>

To Register for 'Fikrati' use the following link:

<http://nstifestival.ae/fikrati>



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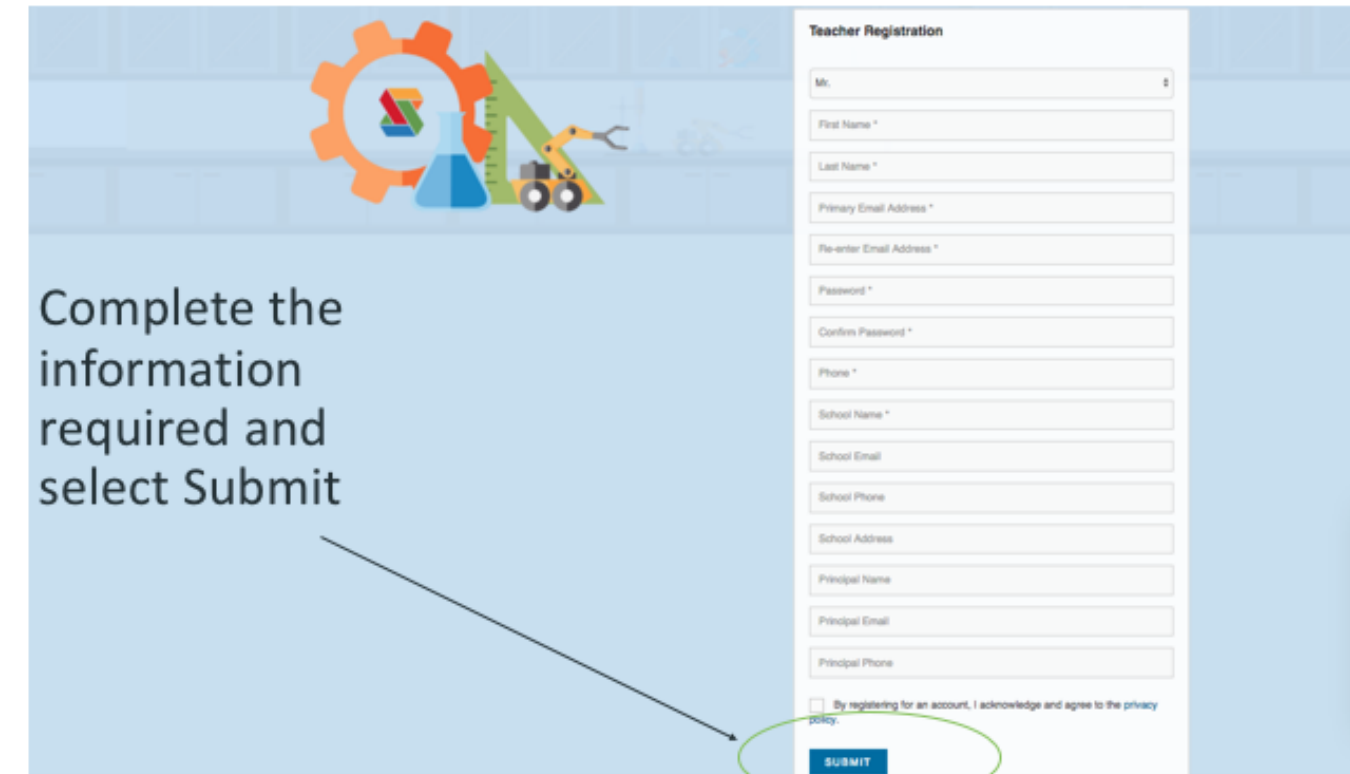
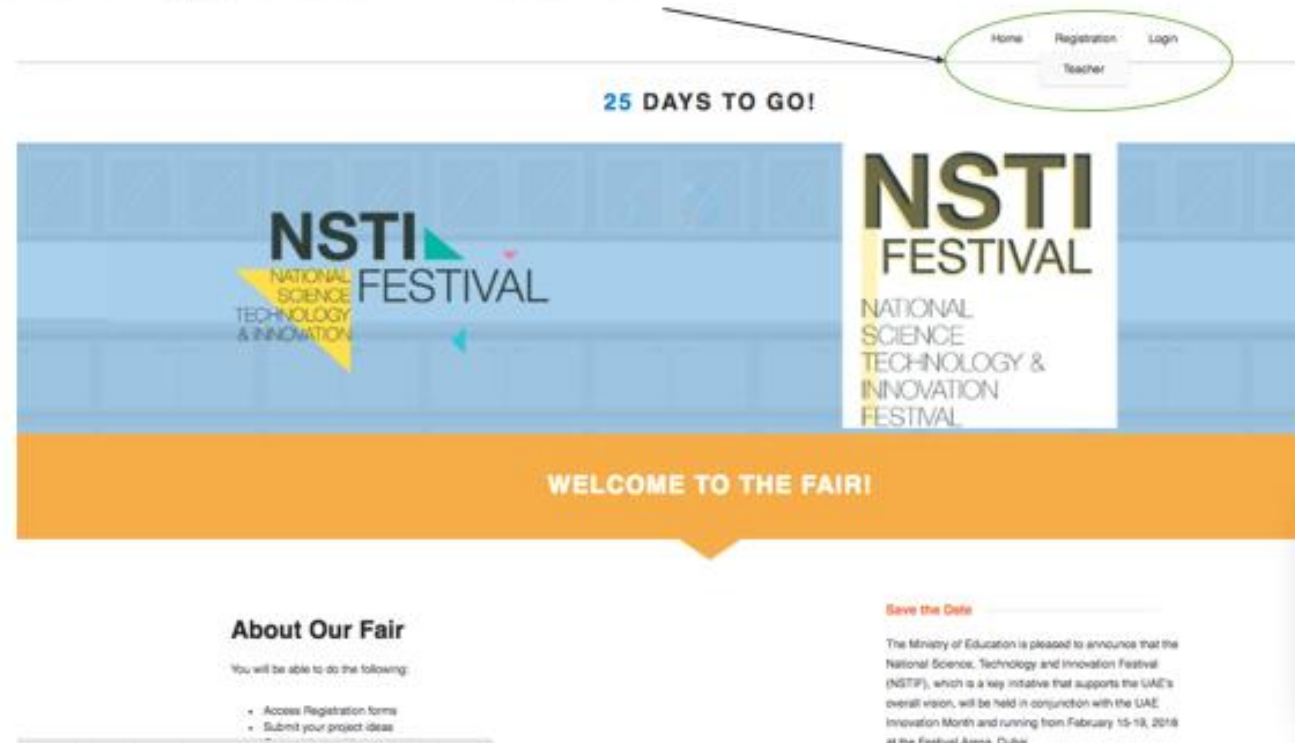


# Teacher Registration

Deadline  
Feb 5<sup>th</sup>



Click Registration > Teacher



Complete the information required and select Submit

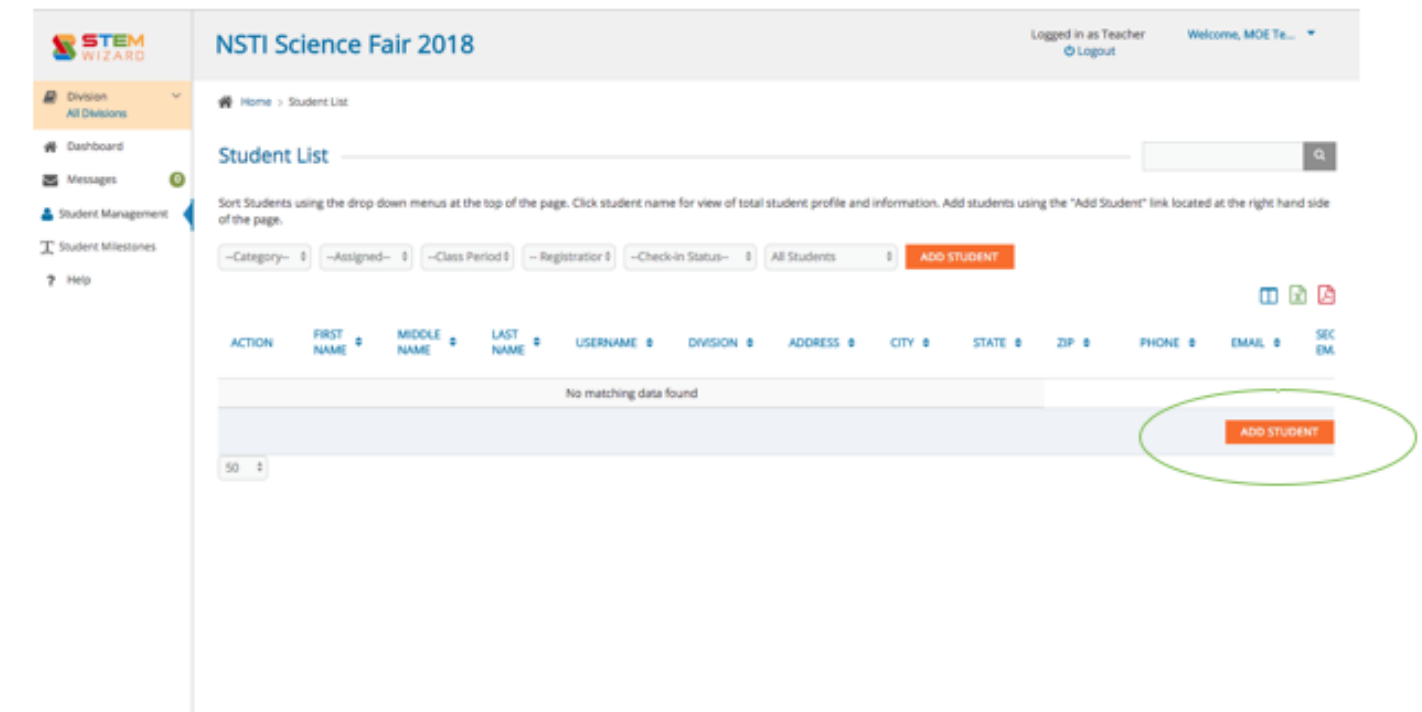
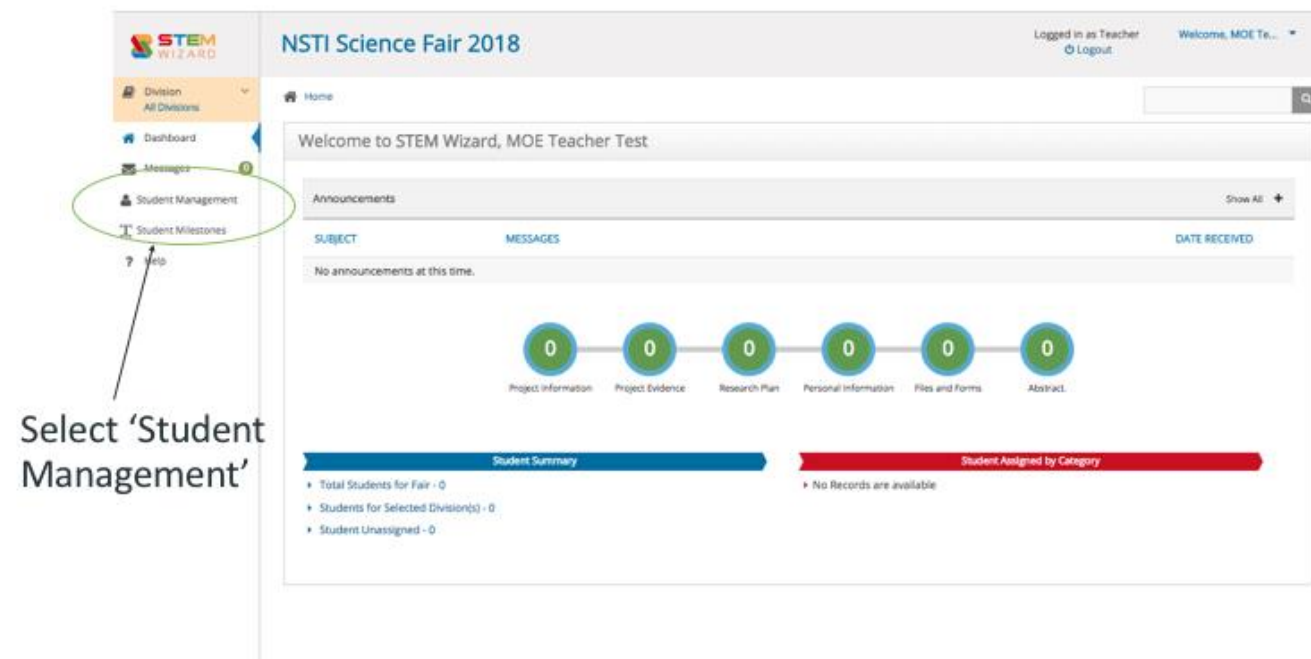
Teachers must register and complete all milestones before the 5<sup>th</sup> of February by clicking on the provided link and filling in all information.

Complete the information required and select Submit. Approval must be granted by NSTI Admins before the teachers can log in. This typically takes 1 hour.



# Log in and add a Student

Deadline  
Feb 5<sup>th</sup>



Teachers must add their students to the platform. When logged in you click on "Student Management".

You must now add the student names who are partaking in the competition by selecting "Add Student" at the bottom of the page



# Log in and add a Student

Deadline  
Feb 5<sup>th</sup>



STEM WIZARD  
NSTI Science Fair 2018  
Logged in as Teacher  
Logout  
Welcome, MOE Te...  
Home > Student Management > Add Student  
Personal Information  
Project Type  Individual  Team  
First Name \*  The way you enter your name here is exactly how it will show up on all fair materials including awards.  
Middle Name   
Last Name \*  The way you enter your name here is exactly how it will show up on all fair materials including awards.  
Address   
Emirate   
Phone Number \*   Extension  Extension   
Gender \*   
Grade \*   
Primary Email Address \*   
Re-enter Primary Email Address \*

Gender \*   
Grade \*   
Primary Email Address \*   
Re-enter Primary Email Address \*   
Parent/Guardian/Secondary Email Address   
Re-enter Parent/Guardian/Secondary Email Address   
Account Information  
Username \*  The username will be what you use to log into your account.  
Password \*   
Confirm Password \*   
Division \*   
Select Preferred Category \*

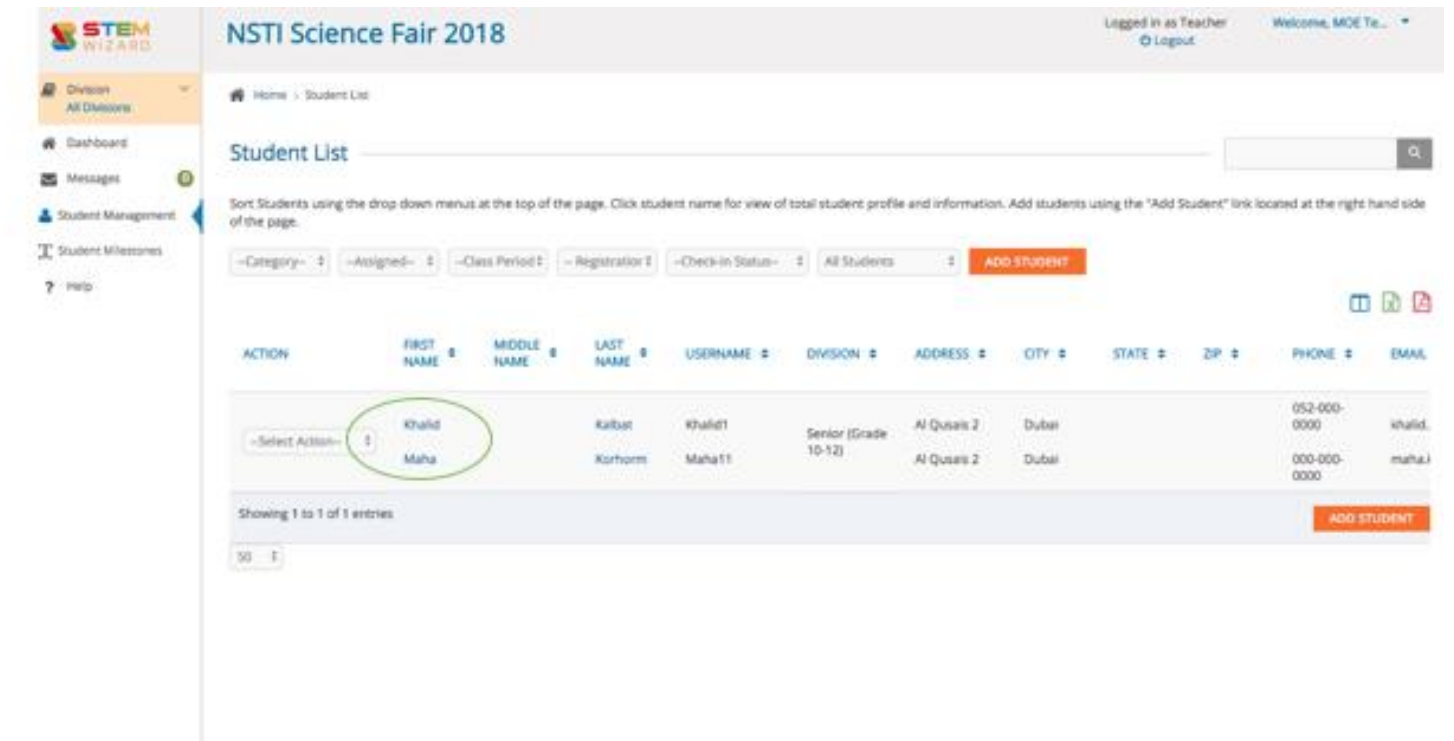
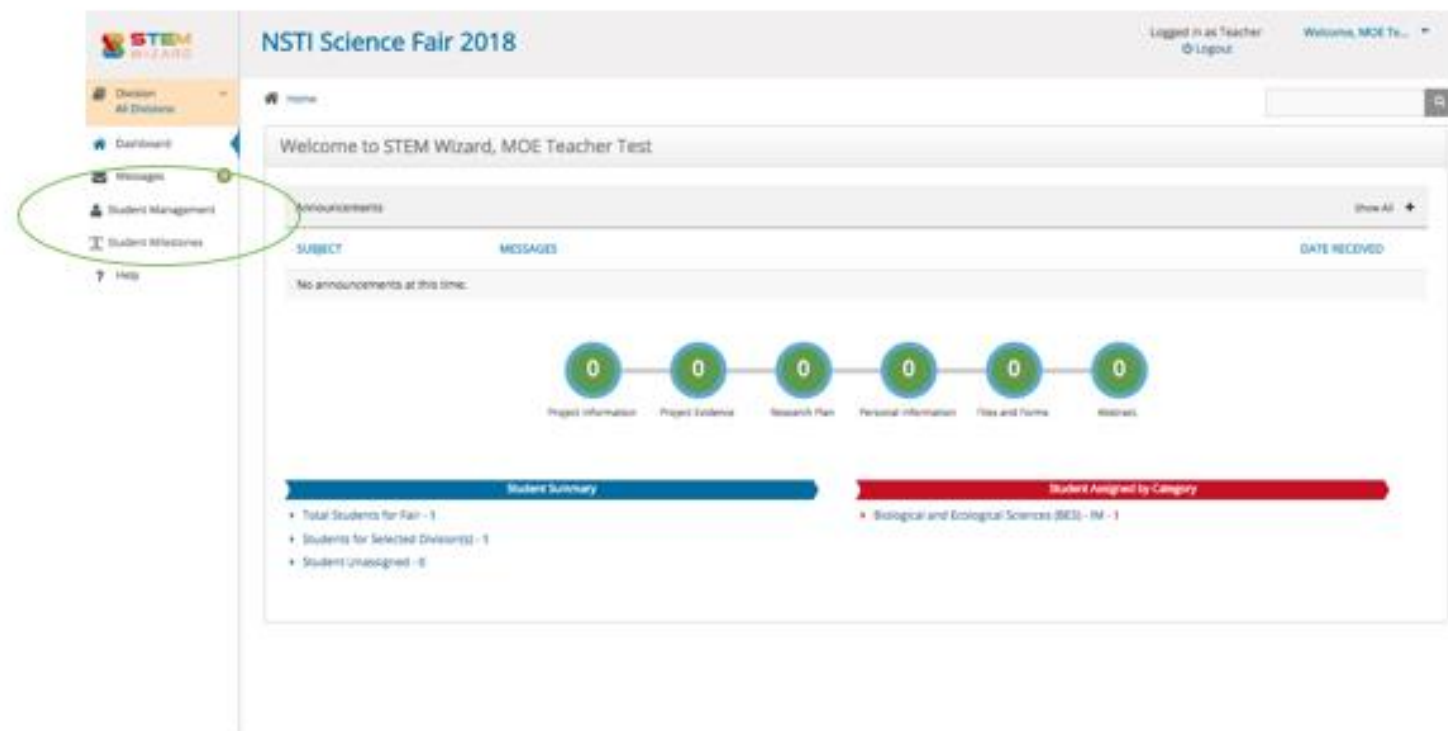
If your student is partaking as an individual in the Science Fair or Fikrati please ensure 'Individual' is selected. If there is more than one team member please ensure 'Team' is selected.

When all necessary information has been completed, Click Submit at the bottom of the page.



# Completing the Milestones

Deadline  
Feb 5<sup>th</sup>



You must now select 'Student Management'  
again

Select the student names from the  
individual/group project.



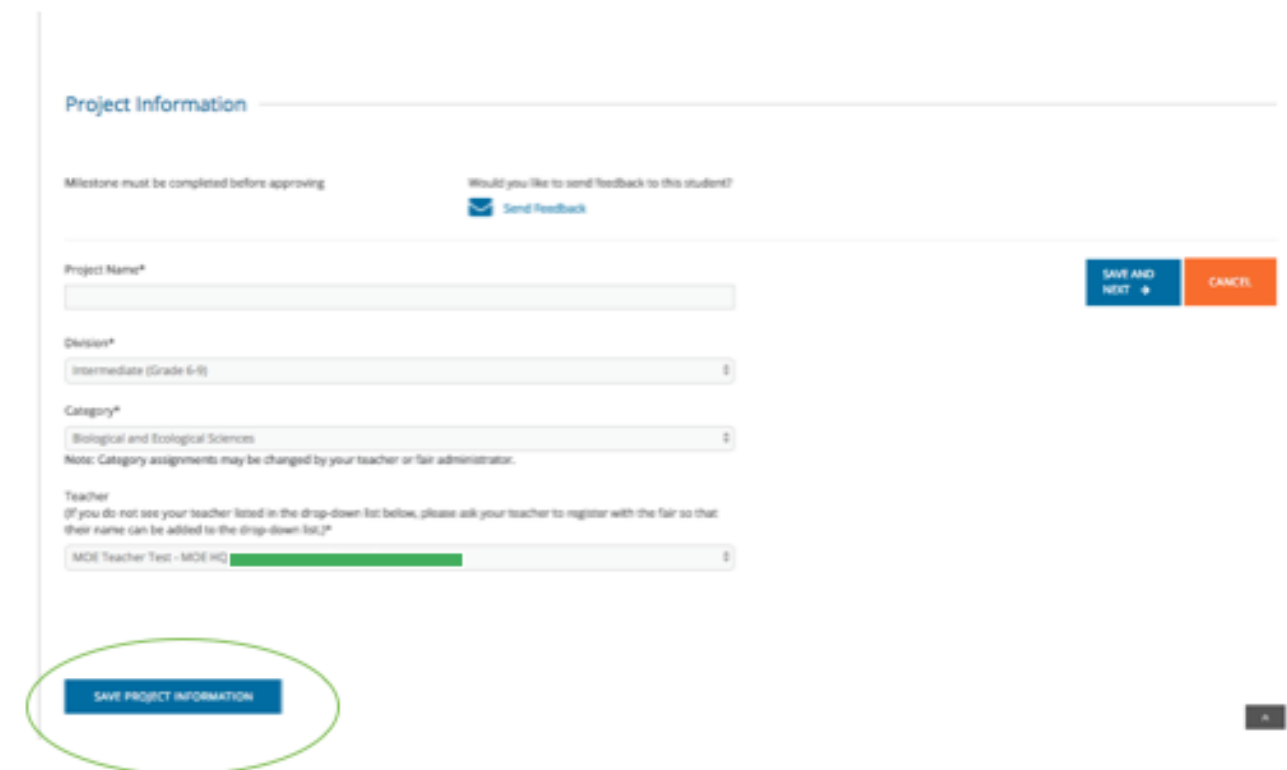
# Completing the Milestones

Deadline  
Feb 5<sup>th</sup>



You will be brought to this page.

The first step you must complete is 'Project Information' for both Science Fair and Fikrati



Fill in the information related to the students project and select 'Save Project Information'



# Completing the Milestones

Deadline  
Feb 5<sup>th</sup>



**Project Information**

Milestone must be completed before approving Would you like to send feedback to this student?  
[Send Feedback](#)

Project Name\*

Division\*

Category\*   
Note: Category assignments may be changed by your teacher or fair administrator.

Teacher (If you do not see your teacher listed in the drop-down list below, please ask your teacher to register with the fair so that their name can be added to the drop-down list.)\*

[SAVE AND NEXT](#) [CANCEL](#)

[SAVE PROJECT INFORMATION](#)

**NSTI Science Fair 2018** Logged in as Teacher  
[Logout](#)

Home - Student List

**Test Student**

Student Profile

**Project Information** **Project Evidence** **Research Tools** **Personal Information** **Files and Forms** **Abstract**

**Personal Information**

Name: Test Student  
Address: Sharjah  
Emails:  
Primary Email Address: teststudent@moe.gov.ae  
Secondary Email Address: jennismat@moe.gov.ae  
Phone Number: 3000000000  
Gender: Male  
Grade: 6

**Project information**

Username: teststudent1  
Project Name:  
Project #:  
Highest Fair Level: NSTI Science Fair 2018  
Origin Fair Name:

**Table Assignment**

Table Assigned #

**Password**

You will now select 'save and next'

You are now ready to begin your second milestone  
You will repeat these steps until all milestones are completed.



## Judges Tips: Science

### Fair

Our very experienced and specialized judges have identified the most common weaknesses in projects at the festival. These weaknesses could result in the project not being as successful as it possibly could be. Please review before submitting your project.

#### **PRIMARY RESEARCH**

Some studies are little more than a description of what is already known about the topic. Researching the existing body of knowledge is only the first stage of any scientific study.

#### **UNRELIABLE EXPERIMENTAL METHODS**

Frequently, projects state a particular method for data collection, which simply cannot collect the data required. Suppose the aim of the project was to find out which washing powder was most effective. All too often students write that they will gather this information via questionnaire

#### **VAGUENESS/UNFOCUSED OBJECTIVE**

A study which aims to find out all about the ozone layer is not a realistic scientific study as no-one could be expected to find this out in the given time. Scientific research requires you to be very specific about what you wish to find out and setting measurable objectives is the only way to present scientific investigation.

#### **SAFETY ISSUES**

Projects which put the students themselves or others at risk of physical injury or disease will not be accepted for the festival.

#### **INVESTIGATION PERIOD**

Sometimes students propose a project that is weak because the period over which the project is being carried out is too short. Judges need to be convinced that the student has given enough time to complete the project.



# SCIENCE FAIR SUCCESS STEPS



## PROJECT DIARY

It is recommended that the students keep a diary which should contain: day-to-day records of how the project is progressing, a full record of the names of sources you have researched. Record everything in your diary and use it as an information store for writing your abstract and completing your display. The students can write a personal comment about how your project is progressing.



## PROJECT REPORT BOOK

In order to fully prepare yourself for the judging criteria on the day of the events it is recommended that you report all of your findings in this organized way:

- 1) Title
- 2) Summary
- 3) Introduction
- 4) Experimental Methods
- 5) Results
- 6) Conclusion
- 7) Recommendation for further research



## VISUAL DISPLAY

Your display is a summary of your project. Do not try to display your entire project, cover just the main points and highlights. Plan your display well in advance. Use a plan to help you make the best use of your space. Work out the dimensions of everything you want to include. How your project is displayed on your stand will be taken into consideration by the judges when reaching their decision.

## CORRECTLY PRESENTED AND WELL CONSTRUCTED

Be sure to adhere to the size limitations when preparing the display. The poster display area is A0 (1189mm X 841mm) The desk is 1100mm X 550mm. The NSTI Festival will not allow additional display space for any project.

## A GREAT TITLE

The title is an extremely important attention-grabber, which should simply and accurately present the research. The title should make the casual observer want to know more.

## ORGANISATIO

Make sure the display is logically presented and easy to read. A glance should permit anyone to locate quickly the title, experiments, results and conclusions. When arranging the display, imagine that you are seeing it for the first time.



## TAKE PHOTOGRAPHS OF YOUR EXPERIMENT

Many projects involve elements that may not be safely exhibited at the exhibition but are an important part of the project. Take photographs of important parts/phases of your experiment to use in your display.

## EYE-CATCHIN

Make your display stand out. Use neat, colourful headings, charts, and graphs to present your project. Homebuilt equipment, paper and use of colour are excellent for project displays. Pay special attention to the labelling of graphs, charts, diagrams and tables, each item must have a descriptive title. Anyone should be able to understand the visuals without further explanation. Make sure that the text is large enough to be read easily.

# SCIENCE FAIR/FIKRATI DISPLAY





# Support for the Science Fair and Fikrati



The **STREAM Team** is a specialized group of Ministry staff who are highly trained in incorporating Science, Technology, Reading, Engineering, Art and Mathematics into everyday education. The STREAM Teams goal is to advance and supplement STREAM education through a variety of activities and experiments in the classes. They will be supporting the Teachers, schools and students in incorporating this into the schools by helping you with the following:

01

## TECHNICAL ASSISTANCE WITH REGISTRATION AND MILESTONE COMPLETION.

The STREAM on a closer basis with the Science Fair and Fikrati Platforms by the NSTI Admins for any issues with registration and Milestone completion.

02

## WEEKEND WORKSHOP FOR EXPERIMENTS

The STREAM team organize and assist the participants in their experiments on Friday the 2<sup>nd</sup> and Saturday the 3<sup>rd</sup> of February in a local community school.

03

## COLLABORATE WITH TEACHERS

The STREAM team will offer their specialized guidance on experimental methods and data collection in collaboration with teachers. This aims to ensure that students are entering the competition with the best possible research

04

## WEEKEND WORKSHOP FOR DISPLAYS

The STREAM team will organize and assist the participants in their displays on Friday the 9<sup>th</sup> and Saturday the 10<sup>th</sup> of February in a local community school.

05

## ORGANISATION OF PARENTAL CONSENT FORMS

Assisting the school teachers in the organization of student files/forms and submission via the NSTI Science Fair/Fikrati Platforms.

06

## STUDENT MANAGEMENT

The STREAM teams will work in collaboration with the teachers to ensure that all students are supervised and are abiding by the Ministry of Education code of conduct before and throughout the festival.



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After completion of the registration stage  
the students must be added to the  
platform as either an individual or a  
group project (maximum 4 in a group)

ADD STUDENT

5-28-2023

START

5-28-2023

REGISTRATION

The first step will be to complete teacher registrations on the  
following platforms depending on the student grade:

KG-Grade 5 - <http://nstifestival.ae/fikrati>

Grade 6-12 - <http://nstifestival.ae/sciencefair>

Ensure that all available facilities and resources are utilized prior to experiments being undertaken. This will maximize the experimental efficiency.

### FACILITIES

Jan 28-Feb 5

Complete all files and forms to be signed by parents/legal guardians and uploaded onto the platform. All documents can be downloaded on the platform on the “Files and Forms” milestone.

### FILES AND FORMS

ଝଡ଼ 1-5

Jan 28-Feb 5

### COMPLETE MILESTONES

The first Milestone is “Project Information” for both Science Fair and Fikrati competitions. Be as descriptive as possible in naming your project and describing your experimental procedure.

ଝଡ଼ 2-3

### EXPERIMENTAL PROCEDURE

Experimental Procedure will be carried out during available classroom time and on the weekend of the the 2<sup>nd</sup> and 3<sup>rd</sup> of February under the guidance of the STREAM team member/teacher. Remember to take photos and document everything in a diary!

ଝଡ଼ 1-5

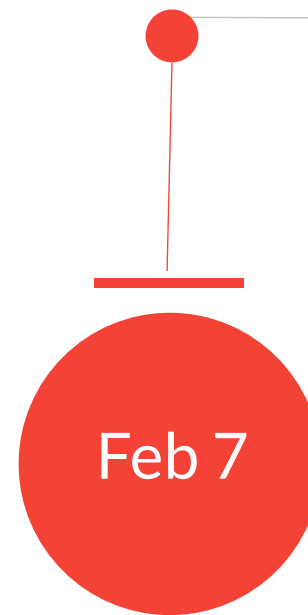
### ABSTRACT

The abstract will aim to summarise your findings from throughout your experiment. This will be one of the most important elements and will be questioned throughout the festival.



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After the abstract has been submitted the entry is considered by a panel of screening judges who carefully consider every project. Following their decision, you will be informed whether or not the project has qualified for the festival. The judges may also request further information at this stage. This screening process will take 2 days to complete



### UNSUCCESSFUL PROJECT

This means that the project will not be presented at the NSTI festival in February. The reason for non-qualification is sent by email to the teacher.



### Successful Project

Teachers will receive an email confirming that the judges have accepted the project. This will also contain more details regarding the festival.

2 36



## NSTI FESTIVAL

The family orientated festival will run for 5 days. During this time, parents, Judges, teachers, families and VIP's will be attending and viewing the experiments.

Student preparation with regard to expected behavior, event facilities, timetabling of activities, and all rules.

## STUDENT PREPARATION

ଶତ୍ରୁ 10-14

ଶତ୍ରୁ 15-19

ଶତ୍ରୁ 14

## PRE EVENT PREPARATION

The evening before the festival begins the STREAM team, teachers and students will prepare their results, displays and speeches for the following days. This will begin from 2pm-9pm.

Feb 9-10

## SCIENCE FAIR/FIKRATI DISPLAY

On these days the STREAM team and Teachers will assist in the completion of their displays for the Festival. Remember the most eye catching display will gather attention and create interest in your experiment.