The **Castle South Middle School 8th Grade Science Fair, November 29 -**December 1, 2017, is an opportunity for you to do a long-term project, to schedule your time, to develop your own ideas, and to build many other important academic skills. We hope that many of the projects will also be entered in the **Tri-State Science and Engineering Fair**, March 8-9, 2018 at the University of Southern Indiana.

**Projects may be from any of the following six categories:**

**Aero, Earth, and Space Science**

**Behavioral and Social Science**

**Biology (Botany & Zoology)**

**Chemistry**

**Medicine and Health**

**Physics and Technology (Engineering, Computer, and Math)**

**Basic requirements:**

1. Students may work alone, or form a team of 2 students, all in the same class.

2. Project must be experimental not just a report or demonstration. There must be an

independent and dependent variable. For best results these variables should be measurable and compared to a control.

3. Scientific method must be followed.

4. Must have a report. Any project without a report will not be eligible for awards.

5. Must have a display board. Displays must be on tri-fold cardboard backdrops. Use rubber cement in attaching items to the display board. This allows items to be repositioned or modified between the two Science Fairs if needed.

6. Space in front of display boards is very limited. No liquids or food items to be displayed. Any projects with foods or liquids displayed will not be eligible for awards.

7. Student names may not appear anywhere on the scientific paper or display. Any paper or project with names appearing will not be eligible for awards.

8. 3 or more photographs of various stages of experimentation should be included on the display board. More photos may be included in the report exhibited at the fair. Photos may not contain faces of experimenters or people tested. Any paper or project with photos of people’s faces will not be eligible for awards.

9. Only invertebrate animals can be tested. **NO VERTEBRATE ANIMALS.** The only exceptions are experiments observing and recording vertebrate animal **behavior.**

10. Failure to meet any basic requirements will result in a lower grade. If for any reason

you are not in attendance at school the day projects are set up, you are still required to get your project and report here to school and set up on time. Someone else may set it up for you if you are not able to.

**Project Selection:**

 **Project topics will be approved upon teacher discretion. Projects may be turned down due to simplicity, another student choosing the same experiment, unsafe, etc. Examples include, but are not limited to:**

* **Mentos and Soda**
* **What liquid cleans a penny the fastest?**
* **Which color candle burns the longest?**
* **Which brand of popcorn pops the best?**
* **Any project that involves how caffeine or energy drinks affects sleep/heart rate/heartbeat.**

**Project set up:**

 WHEN? During class on Monday November 27, 2018.

WHAT? Your display, your report.

 WHERE? Projects should be set up in the Dragons Den.

**Judging:**

Judging of the projects begins at 9:00 a.m. Thursday, the day of the Science Fair. No students are allowed in while projects are being judged. The "Judging Staff' is a group of volunteers, whose careers relate to one of the six categories: Aero Earth and Space Science, Behavioral and Social Sciences, Biology, Chemistry, Medicine and Health, and Physics.

**Awards:**

**1st, 2nd, & 3rd place ribbons** will be given in each category. The number of ribbons given is based on a percentage of the number of projects entered in each category.

Four **Bronze Medals** will be awarded. A Bronze Medal will be given for the best use of technology, the best visual presentation, the best use of mathematics and the best project on environmental conservation or restoration. The "Technology" award will be given to the project demonstrating the best use of a technological device in a project. The device may not be from any kind of kit. The device must be designed and built by the student.

Six **Silver Medals** will be awarded. A Silver Medal will be given for the best project in each of the six categories. The Silver Medal winners will be chosen from the 1st place ribbon winners in each category.

A **Gold Medal** will be given to the best project at the Science Fair. The Gold Medal winner will be chosen from all Silver Medal winners.

**Awards Ceremony**:

A brief awards ceremony for award winners and their families will be held at **6:00 p.m.** on **Thursday.** Winners will be notified at the end of the school day via intercom announcement.

The Bronze Medal winners will receive a check for **$40.00.** Silver Medal winners will receive a check for **$50.00** and the Gold Medal winner will receive a check for **$60.00.**

**Public Viewing:**

 The fair will be open to the public on **Thursday from 6:30 p.m. until 7:00 p.m.**

 The fair will also be open to the public on **Friday from 7:25 a.m. until 1:00 p.m**.

**Project Take Down:**

Friday, the day after the Science Fair, at 1:00 p.m., students will remain in 9th period classes and called by room to take down their projects. Projects will be stored at school until second semester only for those that will be entering the March Tri-state Regional Science and Engineering Fair. **Other students will take their project home on Friday, December 1, 2018.**