# ROBOTICS COMPETITION WITH A TWIST

Afrobot is an amateur robotics tournament that aims to provide South African learners with an opportunity to get involved in a technical projects within a supportive and edutaining environment

#### Our mission

To develop young scientists who are able to identify a problem, analyse information, find solutions and communicate findings effectively

### **Our Objectives**

Stimulate the interest in STEM for learners.

Demonstrate to the leaners that

Mathematics and Physical Science are

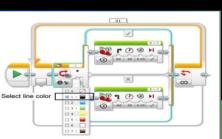
exciting subjects

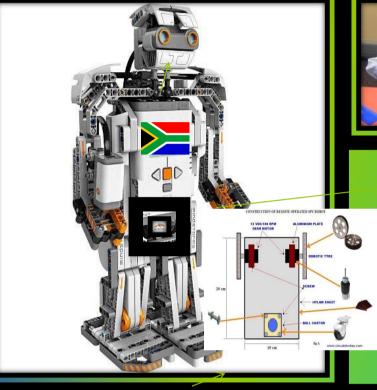


#### Afrobot Programme

The tournament
competition offers learners
the opportunity to gain
knowledge about
electronics, demonstrate
creativity and innovation,
develop technical skills,
employ a strategic mind-set
and promote fair play.
Exploring the exciting









# Benefits of Afrobot Workshop

Taking part in the programme exposes learners to a variety of skills:

- Problem solving
- Team work
- Technical skills (soldering, connection wiring, using a glue gun)
- Programming skills

The ArcelorMittal Science Centre started the programme in 2011 with 6 local schools and this number has grown to 12 schools this year. Initially the number of learners was 12 and this has increased to 36



## **Energy**

The power source is transmitted to the robot through an electrical cable. The maximum voltage in between any of the wires should be less than 13.8V





Robotics for Young Scientists is an exposition, or science fair, where students have a chance to show others their projects about their own scientific investigations.







# Conclusion

sses need to be efficient to keep up with the industry

Robots are useful in many ways. For instance, it boosts economy because businesses need to be efficient to keep up with the industry competition. Therefore, having robots helps business owners to be competitive, because robots can do jobs better and faster than humans can, e.g. robot can built, assemble a car.



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