

# Entries

Proj. No.	Project Title	School Name	Grade
<b>Agricultural Sciences</b>			
1	<b>An efficient algal photobioreactor</b> Janet Okoh	Victoria Girls' High School	11
2	<b>Better but more efficient</b> Luyolo Noyila	Graeme College	11
3	<b>Build your own photo bioreactor</b> Siphosethu Mayekiso	Victoria Girls' High School	10
4	<b>Drip irrigation system and recycling grey water</b> Siwongiwe Giyoma	Ntsika Senior Secondary School	10
5	<b>How microwave radiation affects plant life</b> Jamie Delport Julia Grewar	Victoria Girls' High School Victoria Girls' High School	10 10
6	<b>Investigation of the optimisation of moisture content in soil</b> Saffron Gifford Sarah Stevenson	Diocesan School for Girls Diocesan School for Girls	9 9
7	<b>The remarkable spekboom</b> Gugu Xozwa	Victoria Girls' High School	11
8	<b>What is in onion water?</b> Siphokazi Mazaleni	Kwa-Komani Comprehensive School	12

## **Animal and Veterinary Science, including Marine Animals and Animal Ecology**

9	<b>Animal Poaching</b> Lisakhanya Mgxothereni	D.D. Siwisa Primary School	7
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## Animal and Veterinary Science, including Marine Animals and Animal Ecology

10	<b>Do insects have a colour preference in food?</b> Liyabona Nqumani	Victoria Girls' High School	9
11	<b>South African tadpole and early frog growth studies</b> Quinlan Caiger Veer Bills	Kingswood College Kingswood College	9 9

## Chemistry and Biochemistry

12	<b>Comparing the efficiency of powder vs liquid in stain removal</b> Diana Dixie Hannah Loggie	Diocesan School for Girls Diocesan School for Girls	9 9
13	<b>Investigating optimal conditions for dyeing natural and synthetic materials</b> Laaiba Anjum Lauren Poole	Diocesan School for Girls Diocesan School for Girls	9 9
14	<b>Investigating which type of cling wrap prevents evaporation best</b> Sinovuyo Yawa	Victoria Girls' High School	9
15	<b>Testing the effects of neused oil</b> Siphosethu Ciyane	W.B. Rubusana Senior Secondary School	10

## Computer Science and Information Technology

16	<b>Mathematics and Physical Science study game</b> Siphenathi Mkhosi	Ntabenkonyana High School	11
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## Earth Science: Including Geography, Geology, Oceanography, Housing and Settlement Studies

17	<b>Volcano</b> Chumani Noqayi	Ntsika Senior Secondary School	10
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## Earth Science: Including Geography, Geology, Oceanography, Housing and Settlement Studies

18	<b>Which area is good for human beings</b>		
	Miranda Nyandane	Thubalethu High School	11

## Energy: Non-renewable (Fossil Fuels and use of electricity)

19	<b>Jatropha Oil</b>		
	Siyolisiwe Nelo	Ntaba Maria Primary School	8
20	<b>Non-renewable sources: fossil fuels and electricity</b>		
	Lerato Mkololo	Phandulwazi Agricultural High School	9
	Siyathemba Futyana	Phandulwazi Agricultural High School	9

## Energy: Renewable (Solar, Wind, Wave, Hydro)

21	<b>Electricity generating windmill</b>		
	Bambanani Mkosana	Phandulwazi Agricultural High School	9
	Sinegugu Mbozi	Phandulwazi Agricultural High School	9
22	<b>Hydro-ships</b>		
	Sinovuyo Futuse	Nombulelo Senior Secondary School	11
23	<b>The other things that the sun can do best</b>		
	Karabo Mothlabane	Thubalethu High School	11
24	<b>Wave motion: hydroelectric generator</b>		
	Alyssa Davis	Port Alfred High School	9
	Gemma Knott	Port Alfred High School	9

## Energy: Renewable (Biofuels, Geothermal, Bio-digesters)

25	<b>Photobioreactor, and the perfect conditions</b>		
	Asisipho Mayungula	Mary Waters High School	10

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## Energy: Renewable (Biofuels, Geothermal, Bio-digesters)

26	<b>Producing electricity from cow dung</b> Luphumlo Paul	Lingelihle Senior Secondary School	11
27	<b>Solar Heaters</b> Siviwe Madinda	Ntsika Senior Secondary School	10
28	<b>Biofuels and geothermal energy</b> Ayabukwa Hlamvana Songezo Ndletyana	Phandulwazi Agricultural High School Phandulwazi Agricultural High School	9 9

## Energy efficiency and Conservation: Efficient use of energy and ways of using less energy

29	<b>Electricity energy saver</b> Xhasumzi Zweni	Ntabenkonyana High School	10
30	<b>Heat Insulation</b> Aidan Meyer Johannes Griesel	Kingswood College Kingswood College	9 9
31	<b>Solar gate with a scanner</b> Busisiwe Tsolekile	Ntabenkonyana High School	10
32	<b>Which has more energy between electricity and natural light</b> Jennifer Kosi Yonela Noqayi	Nathaniel Nyaluza Senior Secondary School Nathaniel Nyaluza Senior Secondary School	11 11
33	<b>Which light is right?</b> Henning van Zyl Tariq Rouhani	Kingswood College Kingswood College	9 9

## Engineering: Electronics and Electrical

34	<b>Engineering: vacuum cleaner improved</b> Kabelo Mosola	Thubalethu High School	10
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<b>Engineering: Electronics and Electrical</b>			
<b>35</b>	<b>Fruits making electricity</b>		
	Yanga Mahlelehlele	Nathaniel Nyaluza Senior Secondary School	11
	Zizopho Ntswahlana	Nathaniel Nyaluza Senior Secondary School	11
<b>36</b>	<b>Health Meter</b>		
	Mbuzeli Taliwe	W.B. Rubusana Senior Secondary School	10
<b>37</b>	<b>Household power bank</b>		
	Siphesihle Nxantsiya	Ntabenkonyana High School	10
<b>38</b>	<b>Hydro powered generator</b>		
	Sinesipho Lutywantsi	Ntabenkonyana High School	11
<b>39</b>	<b>Improving the car sunroof</b>		
	Alpha Kotisana	Thubalethu High School	10
<b>40</b>	<b>Investigating electricity shortages</b>		
	Simnikiwe Nombombo	Fikizolo Primary School	7
<b>41</b>	<b>Magnetism</b>		
	Babalwa Mqubuli	Port Alfred High School	10
	Babalwa Ndlobe	Port Alfred High School	10

## Engineering: Chemical, Metallurgical, Civil and Mining

<b>42</b>	<b>Adjustable Bridge</b>		
	Sivuyisiwe Tinga	Ntabenkonyana High School	11
<b>43</b>	<b>Safety stop and cross for pedestrians</b>		
	Sivuyile Ngcefe	Thubalethu High School	10

## Engineering: Mechanical, Aeronautical and Industrial

<b>44</b>	<b>Bike</b>		
	Ibanathi Kanzi	Ntabenkonyana High School	9

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<b>Engineering: Mechanical, Aeronautical and Industrial</b>			
45	<b>Cars and Science</b> Manzini Ntloko	Nkwanca Public High School	10
46	<b>Clean Board</b> Ayabulela Fulani Mihle Maxhwane	Nkwanca Public High School Nkwanca Public High School	10 10
47	<b>Easy-Loo</b> Anam Tyatyeka Lindokuhle Dondolo	Nkwanca Public High School Nkwanca Public High School	10 10
48	<b>On-the-go kettle</b> Zipho Kepeyi	Nkwanca Public High School	10
49	<b>Save Water</b> Anelisiwe Mbanya	Nkwanca Public High School	11
50	<b>Shoe air conditioner</b> Lelethu Nobathana Lindokuhle Mfana	Nkwanca Public High School Nkwanca Public High School	10 10
51	<b>Sky Doc.</b> Oscar Liss Sanele Mboto	St Andrews' College St Andrews' College	10 10
52	<b>Three combination in one</b> Achumile Marwanqana	Kwa-Komani Comprehensive	10
53	<b>Ultra shoes for blind people</b> Amahle Cingci	Lingelihle Senior Secondary School	11

## Environmental Management: Study of Human Interaction with the Environment

54	<b>Controlling <i>Pistia stratiotes</i></b> Sebastian Amner	Graeme College	11
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## Environmental Management: Study of Human Interaction with the Environment

55	<b>Environmental Management</b>		
	Avuyile Mthana	Fikizolo Primary School	7
	Selunathi Mfuku	Fikizolo Primary School	7
56	<b>Let's turn it into fuel</b>		
	Alizwa Tuko	Port Alfred High School	10
57	<b>Life through glass</b>		
	Caitlin Alnott	Port Alfred High School	10
	Kayla le Roux	Port Alfred High School	10
58	<b>Ocean current turbine</b>		
	Troy Birch	Port Alfred High School	10
59	<b>Restoration on dumping sites</b>		
	Buntu Rangula	Nombulelo Senior Secondary School	10
	Mvumelwano Prince	Nombulelo Senior Secondary School	11
60	<b>Waste Management</b>		
	Sihle Kosi	D.D. Siwisa Primary School	7
61	<b>Which tree between the spekboom and the gum tree absorbs the most carbon dioxide</b>		
	Mzwamadoda Mbongwa	Kwa-Komani Comprehensive School	11

## Environmental Science: Changes to the Environment

62	<b>Greenhouse effect and global warming</b>		
	Mihlali Voyi	T.E.M Mrwetyana Senior Secondary School	11
63	<b>Plastic pollution along the Kenton coastline</b>		
	Aiden Froneman	St Andrew's College	10
64	<b>Pollution</b>		
	Olwethu Kabosi	D.D. Siwisa Primary School	7

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## Environmental Science: Changes to the Environment

65	<b>Soil communities as bio-indicators</b>		
	Avumile Yako	Mary Waters High School	10
	Azola Ndawuni	Mary Waters High School	10
66	<b>The effect of acid rain on the growth of plants</b>		
	Shaelyn Walker	Victoria Primary School	7
67	<b>Ways on how we can reduce the impact of drought</b>		
	Phiwe Ntulo	Thubalethu High School	11

## Food Science, Food Technology and Healthy Eating

68	<b>Fresh vs frozen chicken - That is the question?</b>		
	Sara Goodes	Victoria Girls' High School	11
69	<b>Oxidation in fruits and the best oxidation prevention method</b>		
	Jennifer Teifel	Victoria Girls' High School	9
70	<b>Oxidation in various fruits and vegetables and best methods of prevention</b>		
	Kate Jackson-Moss	Victoria Girls' High School	9
71	<b>Partnering turmeric as an anti-cancer agent</b>		
	Emma Goodes	Victoria Girls' High School	11
72	<b>Slowing down oxidation in fruits</b>		
	Emma Koch	Victoria Girls' High School	9
73	<b>Why would mould grow on different types of bread</b>		
	Kayle Oliver	Victoria Girls' High School	10

## Health Care and Sports Science

74	<b>Ballet Exposé</b>		
	Francoise Marais	Kingswood College	9
	Lisa Madikiza	Kingswood College	9



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<b>Health Care and Sports Science</b>			
75	<b>Does the ability to learn improve after rest or after exercise?</b>		
	Mihle Gadu	Victoria Girls' High School	9
76	<b>Exercise to make your body healthy</b>		
	Asive Tyota	Fikizolo Primary School	7
	Xoliswa Sola	Fikizolo Primary School	7
77	<b>Homemade shampoo vs commercial shampoo</b>		
	Robyn Hendricks	Victoria Girls' High School	9
78	<b>Is the use synthetic testosterone fatal?</b>		
	Asanele Yapi	Mary Waters High School	10
79	<b>Life and Longevity</b>		
	Asemahle Sergeant	Ntaba Maria Primary School	9
80	<b>The effects of high heeled shoes</b>		
	Siphiwe Msaseni	Thubalethu High School	11
81	<b>Which common drinks stain our teeth the most?</b>		
	Linen Kunene	Mary Waters High School	10
	Sivenathi Duma	Mary Waters High School	10

## Innovation and Technology

82	<b>Converting a smartphone into a microscope</b>		
	Thobelani Maphazi	Kwa-Komani Comprehensive School	11
83	<b>Create a method/device to collect water using only easily accessible resources</b>		
	Daniel Erasmus	St Andrew's College	10
	Mzolisi Dotwana	St Andrew's College	10
84	<b>Foot Warmer</b>		
	Siphelele Sityebi	W.B. Rubusana Senior Secondary School	12

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## Innovation and Technology

<b>85</b>	<b>Jacket Warmer</b> Caleb Noholoza	W.B. Rubusana Senior Secondary School	10
<b>86</b>	<b>Ruminant bloat detector</b> Sikelela Boqwana	W.B. Rubusana Senior Secondary School	12
<b>87</b>	<b>The mobile greenhouse</b> Tshepo Modigoe	Adelaide Gymnasium	9
<b>88</b>	<b>Water Divider</b> Nande Gwe	Nathaniel Nyaluza Senior Secondary School	10

## Mathematics and Statistics

<b>89</b>	<b>Number Patterns</b> Anathi Mazamisa	Nkwanca Public High School	11
	Sibusiso Sopofo	Nkwanca Public High School	11

## Medical Sciences: Human Biology (Anatomy, Genetics, Physiology)

<b>90</b>	<b>Dental Implants</b> Joshua Orsmond	St Andrews' College	10
<b>91</b>	<b>Investigation of the effect of colour on memory</b> Lauren Carmichael	Diocesan School for Girls	9
<b>92</b>	<b>Manipulating our cone cells</b> Ben Maposa	Kingswood College	9
<b>93</b>	<b>The effect of chewing on concentration</b> Gabriel Walsh	St Andrews' College	10
<b>94</b>	<b>Why smoking is bad for your health</b> Harmony Adesola	Port Alfred High School	9
	Nicolien Botha	Port Alfred High School	9

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## Microbiology and Diseases, Disease-causing Organisms, Medicine

95	<b>At what concentration of bleach are bacteria cost-effectively killed?</b> Zintle Sankobe	Mary Waters High School	10
96	<b>High risk of cancer</b> Liyema Kwenxe	Ntaba Maria Primary School	9

## Physics, Astronomy and Space Science

97	<b>Aerodynamics of a paper plane</b> Babalwa Ntuta	Victoria Girls' High School	9
98	<b>Aerodynamics of paper planes – which design flies the fastest</b> Uuimbabazi Keza	Victoria Girls' High School	9
99	<b>Making a rocket</b> Kuhle Kutu	Phandulwazi Agricultural High School	9
	Zovuyo Fatyela	Phandulwazi Agricultural High School	9
100	<b>Physics, Astronomy and Space Science</b> Avela Ntlathi	Phandulwazi Agricultural High School	9
	Oyama Hela	Phandulwazi Agricultural High School	9
101	<b>To Mars or not to Mars?</b> Kabir Sonne	Graeme College	11
102	<b>The study of the universe</b> Mandisi Ngaba	Phandulwazi Agricultural High School	9
	Ayathemba Tom	Phandulwazi Agricultural High School	9

## Plant Sciences including Marine Plants and Plant Ecology

103	<b>Does aspirin help plants in the same way it helps people?</b> Asemahle Thomas	Mary Waters High School	10
	Khululekile Cekiso	Mary Waters High School	10

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## Plant Sciences including Marine Plants and Plant Ecology

<b>104</b>	<b>Effect of H<sub>2</sub>O temperature on the growth of plants</b>		
	Sisipho Jimmy	Victoria Primary School	7
<b>105</b>	<b>Growing Plants</b>		
	Sihle Mbangata	Fikizolo Primary School	7
	Siviwe Zuzile	Fikizolo Primary School	7
<b>106</b>	<b>How different water affects the growth of plants</b>		
	Azola Jela	Nathaniel Nyaluza Senior Secondary School	11
<b>107</b>	<b>How sunlight affects the growth of plants</b>		
	Catherine Frost	Victoria Primary School	7
<b>108</b>	<b>Mini-ecosystem</b>		
	Simamkele Dyaloyi	Nathaniel Nyaluza Senior Secondary School	10
	Siyanda Gamshini	Nathaniel Nyaluza Senior Secondary School	10
<b>109</b>	<b>Modifying the ultraviolet reflection of plants</b>		
	Mincili Nelani	Victoria Girls' High School	11
<b>110</b>	<b>Smoke (and microwave) signals for Fynbos</b>		
	Meeca Green	Victoria Girls' High School	11
<b>111</b>	<b>The anti-carcinogenic properties of turmeric on mint</b>		
	Sesethu Mqomboti	Victoria Girls' High School	11

## Social and Psychological Sciences

<b>112</b>	<b>Can mint flavoured gum help relax your mind?</b>		
	Kamvelihle Mbawuli	Ntabenkonyana High School	10
<b>113</b>	<b>Can petting a dog lower your heart rate?</b>		
	Cassandra Hillman	Victoria Girls High School	10

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## Social and Psychological Sciences

114	<b>Investigating South Africa's taxi system</b>		
	Cleopatra Nthuthu	Diocesan School for Girls	10
	Hlumelo Kondile	Diocesan School for Girls	10
115	<b>Social and psychological sciences</b>		
	Alizwa Kitsi	Phandulwazi Agricultural High School	9

## Sustainable Development, Recycling and Recycled Materials

116	<b>Using compost to heat water</b>		
	Brian Cordner	St Andrews' College	10
	Matthew Meihlejohn	St Andrews' College	10
117	<b>Using household items to enhance soil for plant growth</b>		
	Lucia Opperman	Diocesan School for Girls	10