

MONTHLY CHALLENGE



ENGINEERING - HIGH SCHOOL CHALLENGE 6 - SEPT/OCT 2023



WATER RECYCLING

Over recent years, drought has occurred in the Southern African hemisphere, causing plants, animals, and humans to suffer from a lack of water (<https://www.gro-intelligence.com/insights/south-africa-drought>). Therefore, finding ways to save and recycle grey water has become critical. Use this following link to read further on the household grey water:

<https://www.greywater.co.za/index.htm>

Design a self-sufficient system that can be used in your household to recycle grey water for it to be drinkable.

You will need to:

- Design a labelled sketch to show an innovative water recycling self-sufficient system to save water in your household.
- Since the water must be drinkable, explain in at least five full sentences how you would test if the water were drinkable and safe.

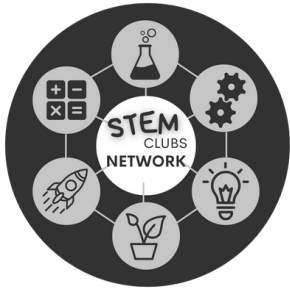
INSTRUCTIONS:

- Please answer each question in your own words on a new line.
- Your answer must be a minimum of 5 sentences.
- Take a photo/scan of the sketch(es) and submit them with your answer.
- Keep this idea for your 2024 Expo project.
- The due date for you to submit your answer on Google form is by latest 15 October 2023 at 15:00.

Please type this link into your Google search bar to answer

<https://forms.gle/XugicAwkBjz9AnTK8>

(You will be asked for your name and surname, your grade and your school name.)



MONTHLY CHALLENGE



INGENIEURSWESE - HOËRSKOOL CHALLENGE 6 - SEPT/OCT 2023



WATERHERWINNING

Oor onlangse jare het droogte in die Suider-Afrikaanse halfgrond voorgekom, wat veroorsaak het dat plante, diere en mense onder 'n gebrek aan water ly (<https://www.gro-intelligence.com/insights/south-africa-drought>). Daarom het dit van kritieke belang geword om maniere te vind om gryswater te bespaar en te herwin. Gebruik hierdie volgende skakel om verder te lees oor die huishoudelike gryswater: <https://www.greywater.co.za/index.htm>

Vraag: Ontwerp 'n selfversorgende stelsel wat in jou huishouding gebruik kan word om gryswater te herwin sodat dit drinkbaar is.

Jy sal moet:

- Ontwerp 'n benoemde skets om 'n innoverende waterherwinningsselfvoorsienende stelsel te wys om water in jou huishouding te bespaar (neem 'n foto/skandering van die skets(e) en dien dit saam met jou antwoord in).
- Aangesien die water drinkbaar moet wees, verduidelik in ten minste vyf volsinne hoe jy sal toets of die water drinkbaar en veilig is.

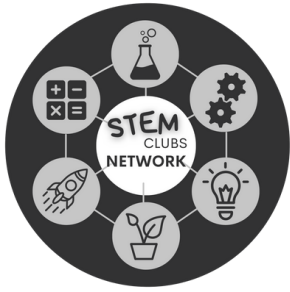
INSTRUKSIES:

- Beantwoord asseblief elke vraag in jou eie woorde op 'n nuwe reël.
- Jou antwoord moet 'n minimum van 5 sinne wees.
- Neem 'n foto/skandering van die sketse(s) en dien dit saam met jou antwoord in.
- Hou hierdie idee vir jou 2024 Expo-projek.
- Die sperdatum vir jou om jou antwoord op Google-vorm in te dien is 15 Oktober 2023 om 15:00.

Please type this link into your Google search bar to answer

<https://forms.gle/XugicAwkBjz9AnTK8>

(You will be asked for your name and surname, your grade and your school name.)



MONTHLY CHALLENGE



EZOBUNJINELI - ISIKOLO SEBANGA ELIPHAKAMILEYO CHALLENGE 6 - SEPT/OCT 2023



UKURISAYIKILISHA KWAMANZI

Kwiminyaka yakutshanje, kuye kwakho imbalela kuMazantsi e-Afrika, ebangela ukuba izityalo, izilwanyana, nabantu babandezeleke kukunqongophala kwamanzi (<https://www.gro-intelligence.com/insights/south-africa-drought>). Ke ngoko, ukufumana iindlela zokonga kunye nokuphinda kusetyenziswe amanzi angwevu kuye kwabaluleka. Sebenzisa eli linki ilandelayo ukufunda ngakumbi malunga namanzi angwevu asekhaya: <https://www.greywater.co.za/index.htm>

Yila isixokelelwano esikwaziyo ukuzimela esinokuthi sisetyenziswe kwikhaya lakho ukuhlaziya amanzi angwevu ukuze abe nokuselwa.

Kuya kufuneka:

- Yila umzobo olebhile obonisa indlela entsha yokuphinda usebenzise amanzi ukuze wonge amanzi kwikhaya lakho (thatha ifoto/isiketshi (imizobo) uze usithumele nempendulo yakho).
- Ekubeni amanzi kufuneka aselwa, chaza ubuncinane izivakalisi ezihlanu ezipheleleyo ukuba ubuya kuvavanya njani na ukuba amanzi ebenokuselwa kwaye ekhuselekile.

IMIYALELO:

- Nceda uphendule umbuzo ngamnye ngawakho amazwi kumgca omtsha.
- Impendulo yakho mayibe zizivakalisi ezintlanu.
- Thatha ifoto/ukuskena kwemizobo kwaye uyingenise kunye nempendulo yakho.
- Gcina le ngcamango yeprojekthi yakho ye-Expo ka-2024.
- Ngenisa impendulo yakho kwifomu kaGoogle emva kuka-15 Okthobha 2023 ngo-15:00.

Please type this link into your Google search bar to answer

<https://forms.gle/XugicAwkBjz9AnTK8>

(You will be asked for your name and surname, your grade and your school name.)