

INTERNATIONAL 2007-2008 POLAR YEAR

Usuku lwezizwe ngencam yomhlaba –Amalwandle

Ngolwesithathu ngomhla ka 18 March 2009, nangaphaya

Ngubani:

Nabanina onomndla ngokwazi ngemibandla yencam yomhlaba (abafundi, abafundisi ntsapho, inzululwazi, abezobugcisa, abokuhambela...).

Yintoni:

Ziziphumo nebandla lomhlaba wonke njenge nxaanye yosuku lwezizwe ngencam yomhlaba (IPY), ingxile kumalwandle encam yomhlaba.

Kutheni:

Ngexesha lonyaka wezizwe ngencam yomhlaba, amakhulukhulu wenzululwazi, iinjini, nezobuchule umhlaba wonke jikelele bafunda ngemibandla yencam yomhlaba. Ezintsuku zencam yomhlaba zibonisa ukubambisana ngendlela yokufunda nagokuba yinxalenye yezizwe ngencam yomhlaba.

Phi:

Ezokolweni, ekuhlaleni, nakwindawo zokufunda emhlabeni wonke.

Nini:

Ngolwesithathu umhla ka 18 March, kuleve izayo.

Kanjani:

Yenza lemisebenzi ingasemva okanye uhambele le website www.ipy.org uzokwazi kakhulu ngemisebenzi eyenziwayo. Ndulula I virtual Balloon ekubonisa indawo ukuyokule website www.ipy.org. Njonga ngasemva oko-oko uzobona iibaloni ezinyukayo ezijikele umhlaba wonke. Thetha nenzulwazi ngexesha zenzekayo. Funda ngesayenzi yencam yomhlaba, yiba ngummeli welizwe lakhongencam yomhlaba, thatha inxaxheba ngekamva lonyaka wezizwe ngencam yomhlaba (IPY) ngezintsuku zencam yomhlaba (polar days).



Funda banzi ngamalwandle akwincam yomhlaba kule website www.ipy.org.

Inkqubo zokubandisa nezokutshonisa kumalwandle wencam yomhlaba, nokujikelezwa kencam yomhlaba ngamanzi angumxube kubo bonke ubunzulu bolwandle lwehlabathi basebenzisa eyona ndlela ingcono ukulawula isimosezulu emhlabeni. Amalwandle encam yomhlaba andlala eyona ndima yake yabaluleka kakhulu kumhlaba wonke kwi carbon cycle, ukususa lomoya umdaka besiwuphefumla ngenkqubo zomchiza (chemical processes) nangeze nzululwazi ngezilwanyane nangezityalo (biological processes). Amalwandle encam yohlamba axhasa abalobi bentlazi emhlabeni wonke, nentaka zencam yomhlaba ezixhomekeke e-ayisini nezilwanyane ezenyisayo, kunye ne bears ezwi kwi Arctic nentaka zase Antarctic (penguins). Yonke lemisebenzi yamalwandle encam yohlaba inobundlelwane ubungummangaliso kwi-ayisi yaselwandle; ingukqungukuko ekuhlenganeni kwamalwandle encam yomhlaba – i ayisi sitim (ice system) ngeze idale unkqubano.

Sisidlo sasemini santoni?- kukutya komsebenzi wamalwandle encam yomhlaba

Izinto ezifunekayo: Icadi lomfundi ngamnye okanye ithim, izinto zokuphawula okanye izinto zokutshitsha imibala, izinto ozomane uzisebenzisa malunga nobom bolwandle kwincam yomhlaba, umtya.

Inkqubo elandelwayo:

- Yenza ilisiti ye polar marine life kunye ne whales, birds, seals, fish, krill, zooplankton and phytoplankton... and polar bears (Arctic) or penguins (Antarctic).
- Umfundi ngamnye okanye ithim mayikhethe into enamalungu asebenziselanayo yenze umzobo umkhulu ngayo, iphinde idwelise izinto ezindla ezi organism kunye namaxhoba azo.
- Omnye umfundi uzobonisa isithombe sokuqala.
- Abafundi bengeze i-organism zabo ukuba ziyahambelana kwi food chain (ukudlana kwa-zo). Bonakalisa ukuba zihamba kanjani ngemigca emincinci. Qhubeka ukwenza lo food web desike zonke i-organizim zibekho ngendlela efanele zihambe ngayo kwi food web.

Enye indlela: Ncamathisela izithombe zakho kubafundi wenze unxibelelwano ngomtya.

Umfundi wokuqala uzobanomtya onebhola awundlisele komnye umfundi uhambelane ne food chain. Isigaba nesigaba sindlale indima yaso apho kwelo chain. Uphinye-phinye lizoya phambile luzihlola ukuba lufane ukuba ndawoni desike wonke umfundi ahambelane ne food chain.

Ingxoxo zinvo:

- Hlanganisa uhlobo olunye ngexesha kuzothethwa ngobundlelwane bazo.
- Yenza i artic and Antarctic food webs, qwalasela phezulu nasezantsi kwi food chain, nezindidi zixhaphakileyo apha phakathi kwi food chain. Thetha ngendima edlala ngabantu, krill nangendima echaphazela abemi apha kwelisheyini.
- Susa ezindidi zichaphazekayo ngomsebenzi wabantu apha kule web.
- Ichaphazeka njani yonke lesisitim?
- Ichaphazeka njani le food chain bubushushu bamalwandle encam yomhlaba.

Enye indlela yomsebenzi – ukujikeleza kolwandle: Bonakalisa ubunzima-mthamo (density) bamanzi ukuba bukuchaphazela kanjani ukujikeleza kolwandle, sebenzisa intanki elibonisa into engaphakathi, faka ihafu yamanzi amasha, namanzi asendlini (room temp. water). Sebenzisa izinto eziyimibala zokutya ukwehlula ezintlobo zamnzi. Kwelinye icala yenza amanzi aluhlaza aqinileyo (“iceberg”) okanye abandayo, amanzi aluhlaza anetyiwa. Kwelinye icala hlukuhla lamanzi wengeze amanzi adikidiki, namanzi amatsha abomvu. Qwalasela ukuba ahlanguka kanjani njengoba ejikeleza lamanzi. Thetha ngombandla wencam yomhlaba ukuba ukuchaphazela kanjani ukujikeleza kolwandle umhlaba wonke.