



Prize Winner

Science Writing Year R-2

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Waste not Want not ^① by Ellie Girgolas.

Waste management-how important is it?

Covid 19 is generating a lot of extra waste, in particular the waste from disposable face-masks. It takes 450 years for a disposable facemask to break down. (Figure 1) Therefore it is important to manage face-mask waste in a responsible way. In 2020, 1.6 BILLION face-masks found their way into the ocean.

Disposable face-masks are made from micro-sized* plastic fibres that can-

* (1) micro-sized plastic fibres are 1-10 micrometres thick

Cannot be easily biodegraded. Facemasks that end up in our environment, are broken down by a process called weathering.*² Scientists like Dr. Genbo Xu who study plastic pollution, have found that disposable facemasks in our waterways release dangerous micro sized particles*³ in only a few weeks, and then break down into even smaller particles*⁴ harming marine life, bird life and humans! (Figure 2)

*⁽²⁾ weathering e.g. - from the sun, air, heat, moisture

*⁽³⁾ micro sized particles are smaller than 5mm

*⁽⁴⁾ particles smaller than micro sized are less than 4 micrometre

On 6 April 2022, I presented to my School leadership team (Figure 3) about introducing Terra-cycle facemask recycling bins for our School Community.

Facemasks can be recycled into plastic pellets to make many new products, including park benches and decking. Australian scientists have even found a way to use recycled facemasks as material for roads. Waste management of disposable facemasks is extremely important for the future of our environment.

* * *
* 200 words * * *

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FIGURE 1

It takes 450 years for a disposable facemask to break down.



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FIGURE 2

How facemasks impact on Wildlife and humans

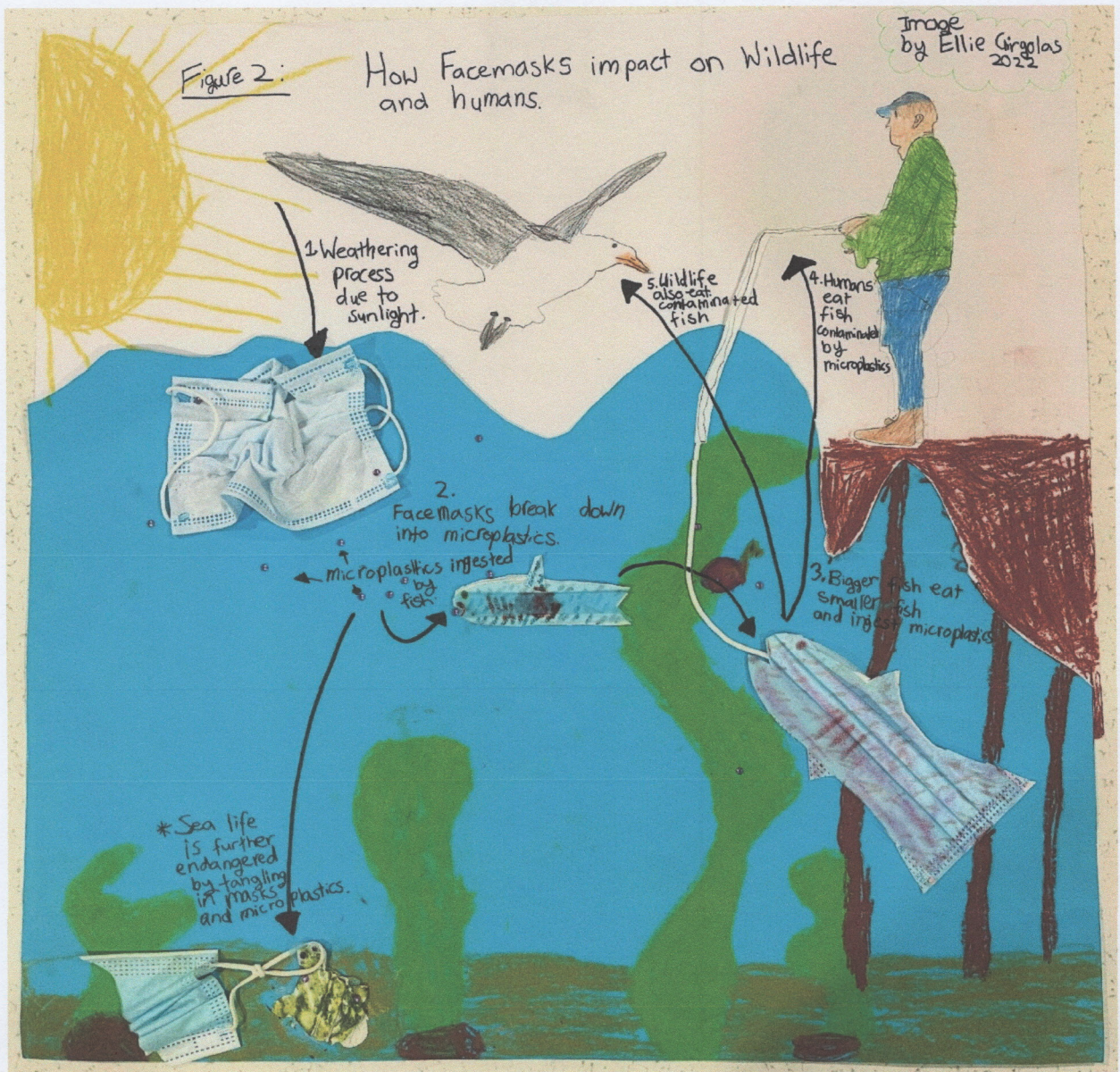


Image created by hand by Ellie Girgolas,
using information sourced from
WWW. sciencedirect.com

FIGURE 3

Presenting to my school leadership team about waste management of facemasks



April 6th 2022

Waste management road trip to see disposable mask recycle boxes



Creating my reference resource (for Figure 2)



Creating my reference resource (for figure 2)

