

# Ocean Guardian



Yiming Yang Apparel Design CADS 2770

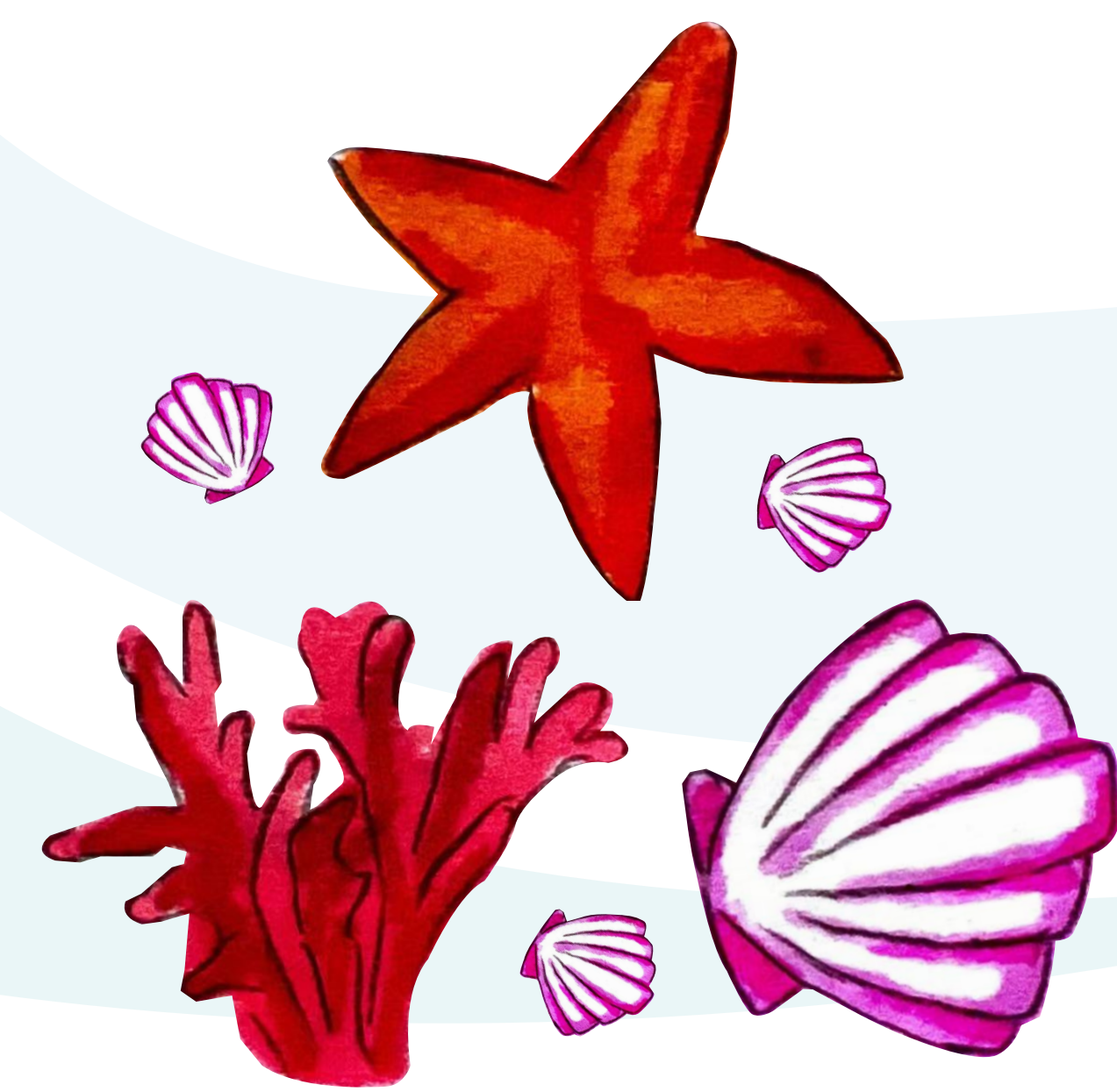
This line focuses on reducing water pollution and protecting the marine ecosystem. That's why I use organic cotton and botanical dyes to create this line of eco-friendly casual wear for women aged 15-35. And it has a positive impact on sustainability.

## Pantone Color Palette

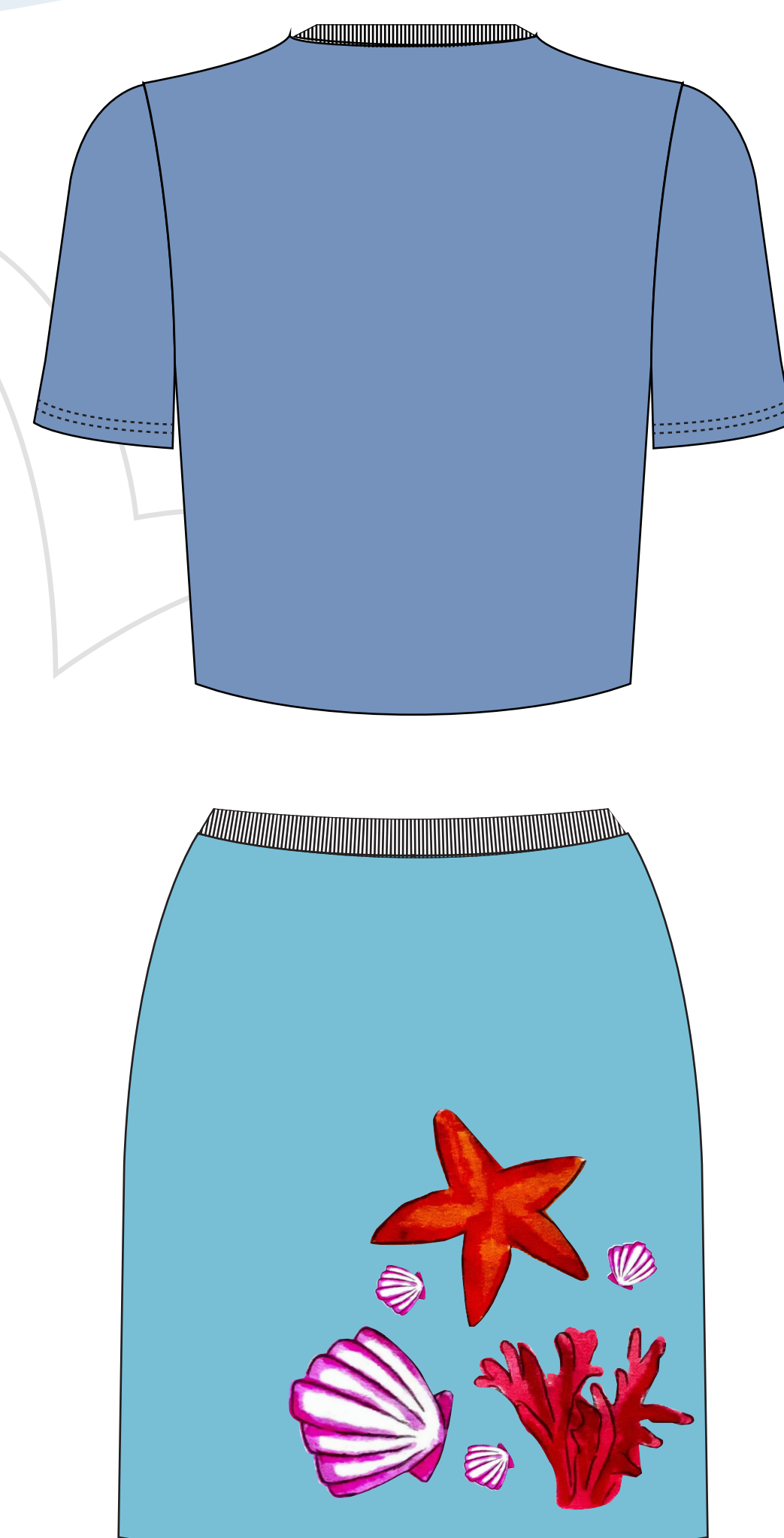
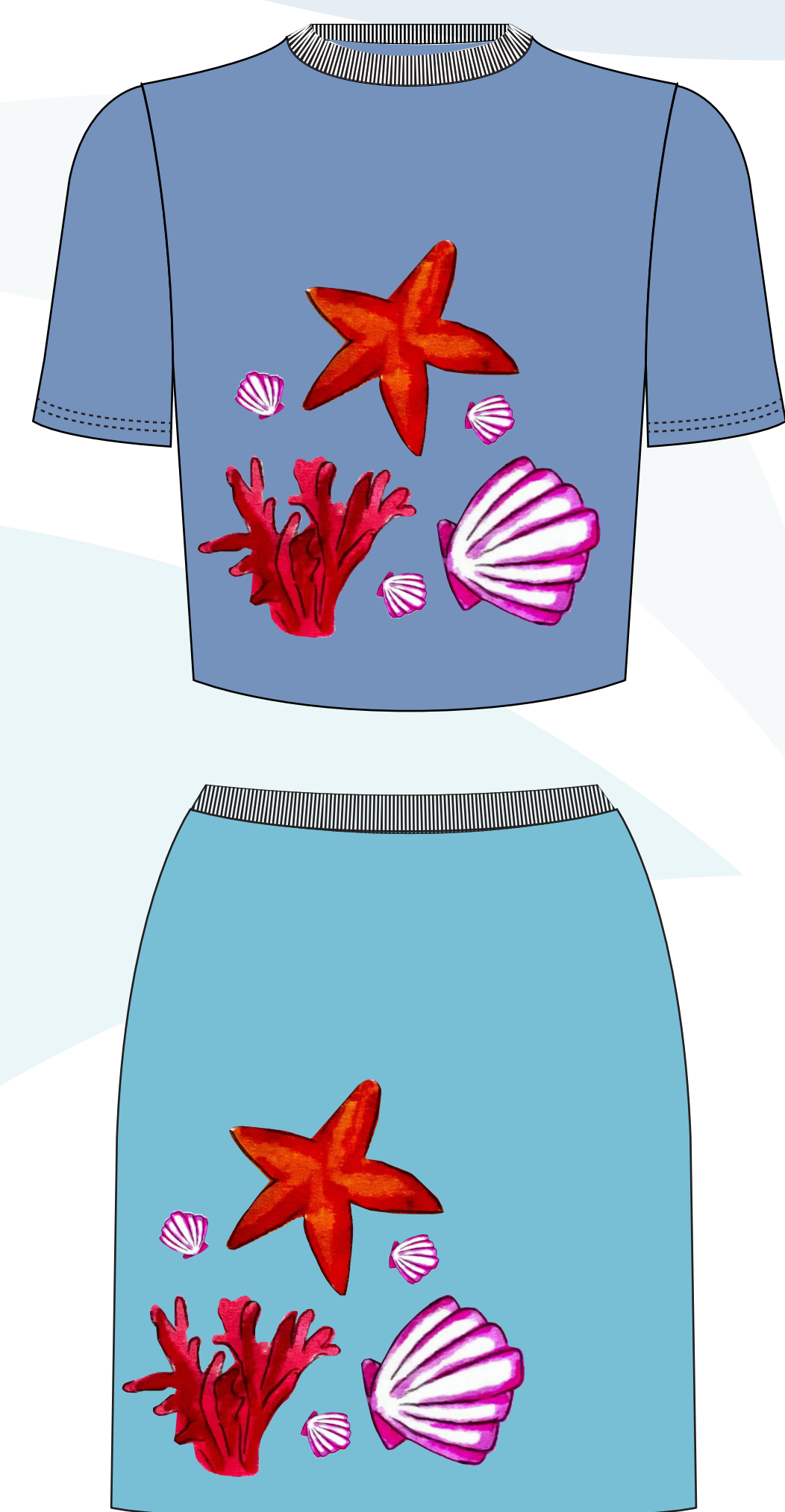
Gold 14-0952 TCX	Pink 12-2908 TCX	Pink 18-2042 TCX	Orange 17-1461 TCX	Orange 18-1564 TCX	Red 18-1553 TCX	Red 19-1875 TCX
White 11-0700 TCX	Blue 12-5206 TCX	Blue 13-4307 TCX	Blue 14-4816 TCX	Blue 15-3930 TCX	Blue 18-4143 TCX	Blue 19-3945 TCX

### Look 1: Under the Sea

I used a lot of underwater elements, such as shells and starfish.



100%  
Organic Cotton  
Plain Weave

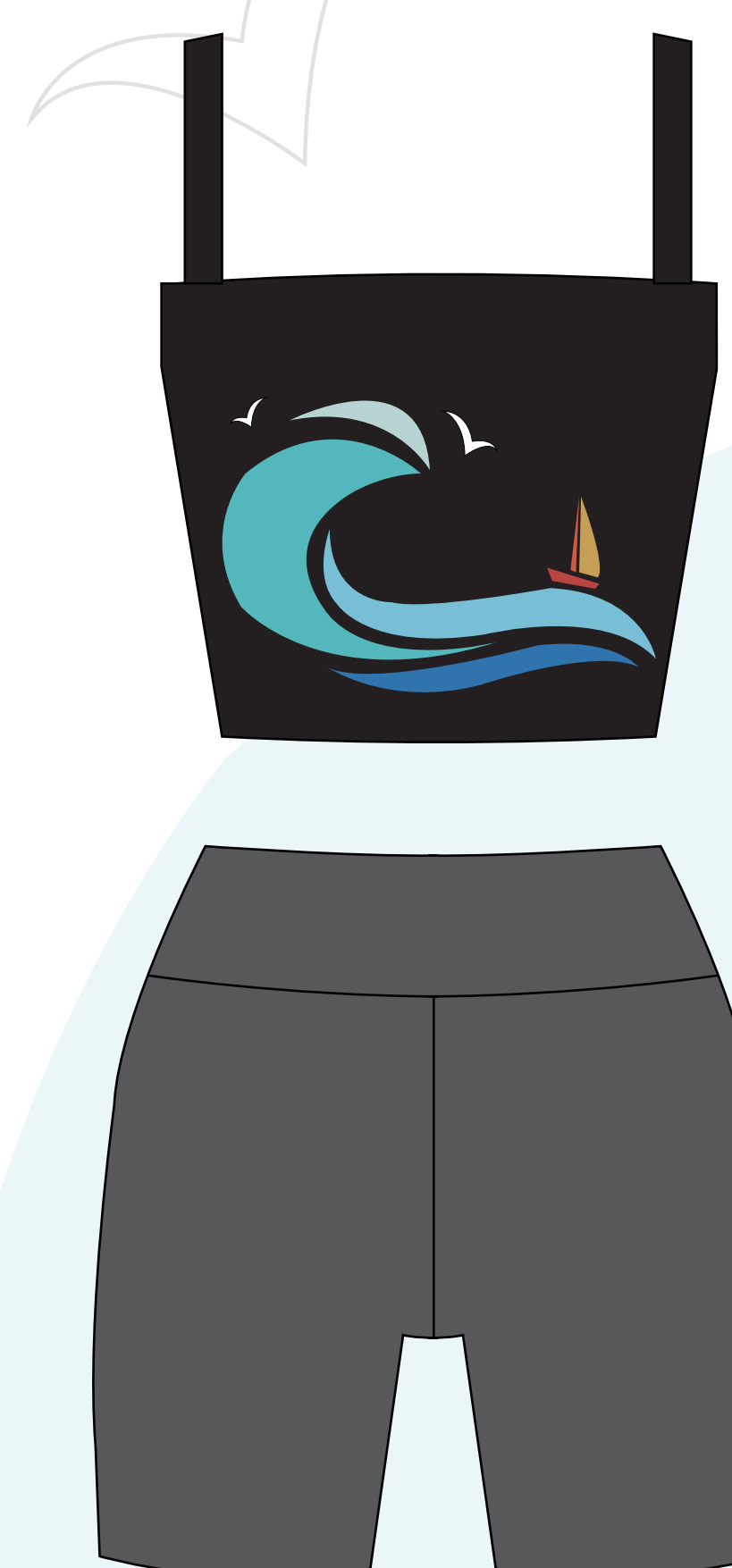
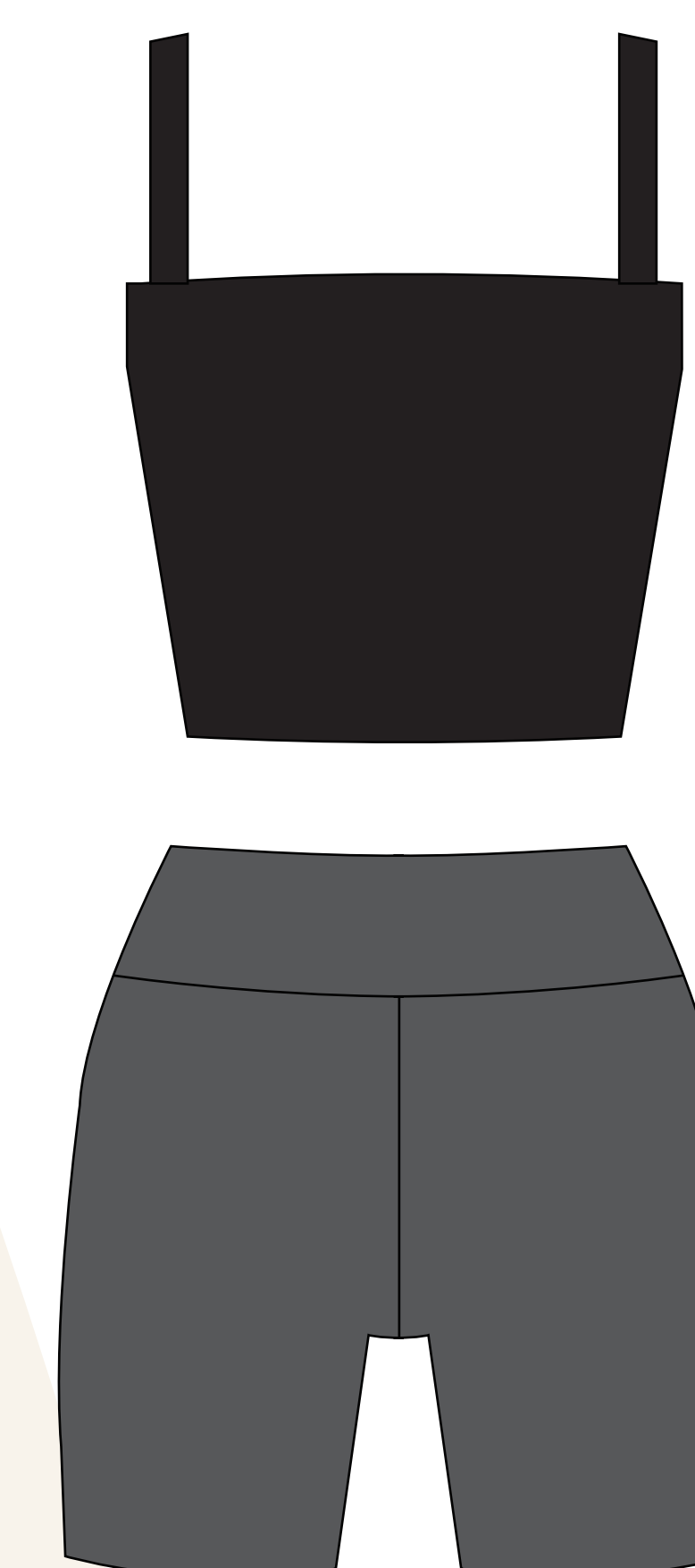
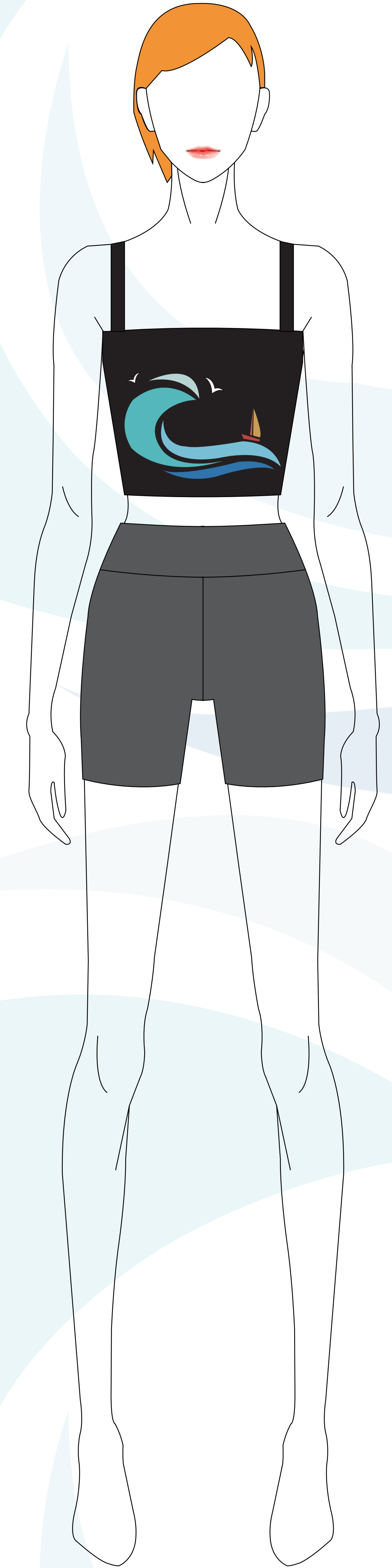


### Look 2: Above the Sea

I used elements above the sea, such as boat and seagulls.



95% Organic Cotton  
5% Spandex Jersey



# Ocean Guardian



## Inspiration

Inspired by the preservation of marine ecology, this casual apparel design promotes sustainable fashion while highlighting the beauty and diversity of marine life. I use marine life motifs such as shells, coral and whales to reflect the wonder of the underwater world. To minimize the impact on the environment, I will use biodegradable, skin-friendly, high-quality organic cotton, reducing reliance on synthetic fibers. In addition, the use of botanical dyeing ensures that no harmful chemicals are released into the water supply, helping to prevent pollution and protect fragile aquatic ecosystems. Through this eco-conscious approach, the collection aims to raise awareness about the protection of water systems, while providing stylish, comfortable and ethical casual wear for environmentally conscious individuals.

## Customer Profile

My price point is young designers. The price of my single product is above \$35. My target customers are women from 15 to 35 years old. They can be different professions, but their salary should ideally be over \$5,000.

I want my customers to shop more rationally, focusing on the practicality, durability and environmental protection of the products.

Because we plan to sell our products both online and offline. So my target customers will not only buy online, but also have the experience of trying on clothes offline.

Because our products are made of organic cotton and botanical dyed, they require a high level of craftsmanship. So I want my customers to focus on the practicality and sustainability of our products and to keep buying them.

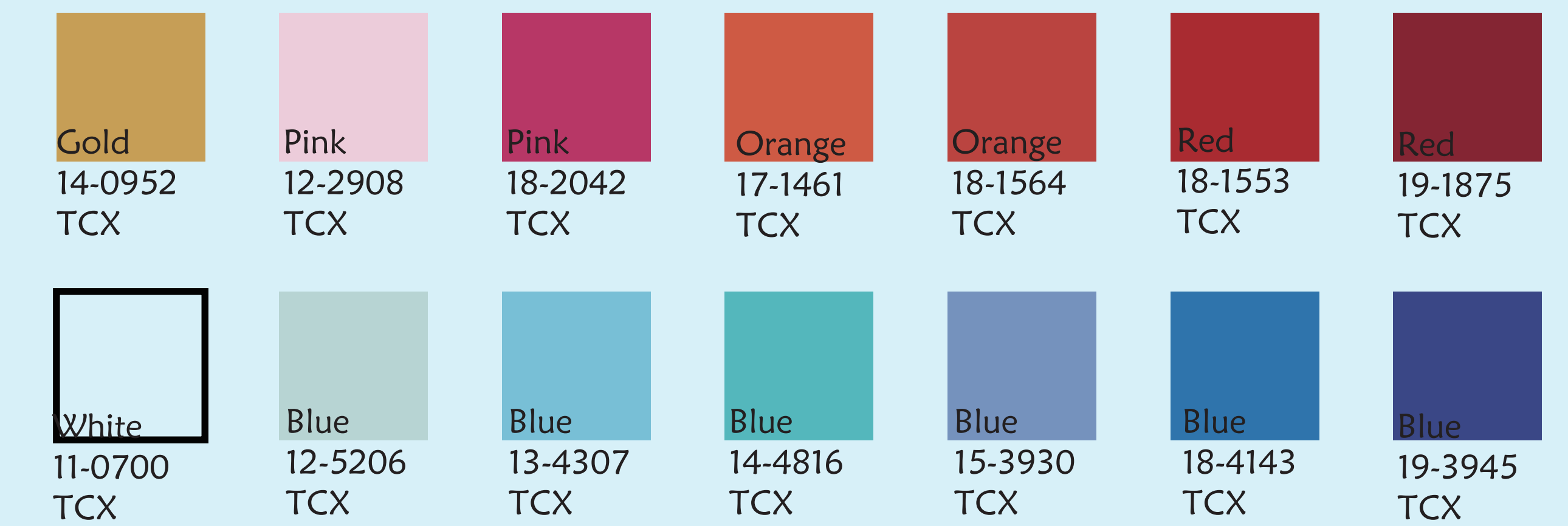
## Organic Cotton

Organic cotton is a type of cotton grown using organic farming methods, which is more environmentally friendly in its growth, processing and use, dramatically reducing pollution to the environment compared to conventional cotton. Conventional cotton cultivation uses a large number of chemical pesticides, insecticides and herbicides, which can pollute the soil and groundwater. Organic cotton completely prohibits the use of these chemicals, switching to natural fertilizers and biological control methods (such as natural enemies to control pests), to ensure that water and soil are not polluted. Many organic cotton products using non-toxic or low-impact dyeing techniques to avoid chemical dyes to pollute water. Harmful substances such as formaldehyde, heavy metals and whitening agents are not used in the production process, making it safer for humans and the environment. Relative to conventional cotton needs a lot of irrigation, organic cotton is more dependent on natural precipitation, coupled with the health of the soil's water retention capacity is stronger, can reduce 20% -50% of water consumption.

## Botanical Dyes

Botanical dyes are natural pigments extracted from the roots, stems, leaves, flowers, fruits or barks of plants and are used for textile dyeing. Compared to synthetic dyes, Botanical Dyes are more environmentally friendly, safe and biodegradable, making them an important choice for sustainable fashion. While traditional dyeing requires a lot of water rinsing and chemical treatment, plant dyes generally use a low-water dyeing process to reduce water consumption. And based on the fact that plant dyes are naturally biodegradable, they do not cause plastic pollution.

The colors I use require different plant pigments to dye them.



## AATCC Test Method

### TM146 Dispersibility of Disperse Dyes: Filter Test

This test method is suitable for measuring the dispersibility of disperse dyes. This test can measure the amount of water used in the dyeing process and therefore saves a lot of water.

### TM206 Free and Hydrolyzed Formaldehyde: Water Extraction

This test method extracts water containing free or hydrolyzed formaldehyde from fabrics and determines formaldehyde. This method determines formaldehyde contamination of water. This protects the water better.

## AATCC Virtual Event

The AATCC virtual event described why standards are important, how different standards and test methods are used, how some test methods are categorized. In addition to these, the event presented a lot of interesting knowledge, such as moisture management, colorfastness, microplastics and fiber fragments.

This was a great help in choosing a test method.

## Membership Benefits

AATCC offers a variety of online courses, seminars, and journals to keep me on the cutting edge of textile materials, eco-friendly processes, and functional fabrics to inspire my creativity.

At the same time, AATCC organizes industry events and networking meetings, giving me the opportunity to meet fabric suppliers, textile engineers, and brands, expanding my resources and fostering collaboration.