## Research question 1: What is the continent frequency distribution? Analysis:

By using the basic analysis functions in Excel, I made the following chart. The first question which should be put forward is why there is no collection from Antarctica? To answer this question, I think I should first go back to my original data to see if the records of which continent value is Antarctica was processed and ignored in the data cleaning process. Secondly, I need to reach some museum curators to ask how they get the original continent information about their collections. For example, if they get an artefact from the Russia, how do they decide it is from Asia or Europe? I am guessing maybe it is this decision-making process leads to the result that no collection is from Antarctica.

Chart 1: Frequency distribution of continents

Continent	Frequency	Relative Frequency	% Frequency	Percent Frequency
Africa	18	0.000868265	0.09%	0.086826492
Asia	179	0.008634412	0.86%	0.863441223
Europe	2415	0.11649221	11.65%	11.64922097
North America	18060	0.871159134	87.12%	87.11591337
Oceania	16	0.000771791	0.08%	0.077179104
South America	43	0.002074188	0.21%	0.207418841
	20731	1	100.00%	100

Based on the above-mentioned chart, I further made the following pie chart and histogram.

% Frequency of Continent Africa 0.09% Europe Asia 11.65% 0.86% Oceania 0.08% South America 0.21% North America 87.12% Asia Europe North America Oceania Africa South America

Figure 1: % Frequency of continent in a pie chart

% Frequency of Continent 100.00% 87.12% 90.00% 80.00% 70.00% 60.00% 50.00% 40.00% 30.00% 20.00% 11.65% 10.00% 0.86% 0.09% 0.08% 0.21% 0.00% Africa Asia Europe North Oceania South America America

Figure 2: % Frequency of continent in a histogram

The result is self-explained. 87.12% of the collections are from the North America. According to American census data in 2017, Asian American accounts for 6.9% of the total U.S. population. However, in this study, I found only 0.86% of the artefacts in the United States art museums are from Asia. Further question is raised: Can an Asian American child really see himself/herself when he/she goes to the museum in the United States?

## Question 2: Among the artefacts from Asia, what is the frequency distribution of the countries?

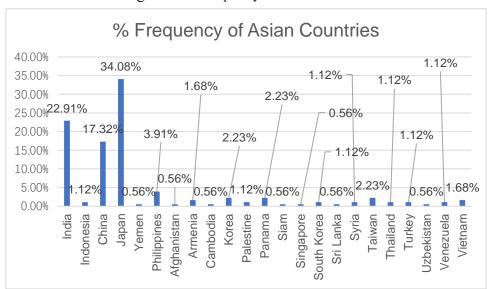
## **Answer:**

Based on the collected data, the following chart and histogram were made.

Chart 2: Frequency distribution of countries

Country	Frequency	Relative Frequency	% Frequency	<b>Percent Frequency</b>
India	41		22.91%	22.90502793
Indonesia	2	0.011173184	1.12%	1.117318436
China	31	0.173184358	17.32%	17.31843575
Japan	61	0.340782123	34.08%	34.07821229
Yemen	1	0.005586592	0.56%	0.558659218
Philippines	7	0.039106145	3.91%	3.910614525
Afghanista	1	0.005586592	0.56%	0.558659218
Armenia	3	0.016759777	1.68%	1.675977654
Cambodia	1	0.005586592	0.56%	0.558659218
Korea	4	0.022346369	2.23%	2.234636872
Palestine	2	0.011173184	1.12%	1.117318436
Panama	4	0.022346369	2.23%	2.234636872
Siam	1	0.005586592	0.56%	0.558659218
Singapore	1	0.005586592	0.56%	0.558659218
South Kor	2	0.011173184	1.12%	1.117318436
Sri Lanka	1	0.005586592	0.56%	0.558659218
Syria	2	0.011173184	1.12%	1.117318436
Taiwan	4	0.022346369	2.23%	2.234636872
Thailand	2	0.011173184	1.12%	1.117318436
Turkey	2	0.011173184	1.12%	1.117318436
Uzbekista	1	0.005586592	0.56%	0.558659218
Venezuela	2	0.011173184	1.12%	1.117318436
Vietnam	3	0.016759777	1.68%	1.675977654
	179	1	100.00%	100

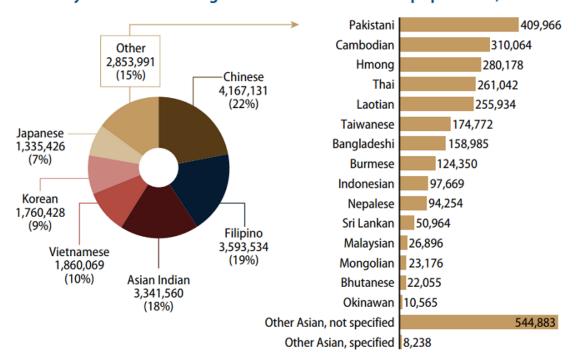
Figure 3: % Frequency of Asian Countries



Among the artefacts which are originated from Asia, 34.08% of them are from Japan and 22.91% are from India.

The following is a pie chart from Bureau of the Census. In my future study, I would connect my analysis results with the Asian American population data.

## Ethnicity and national origin of the Asian American population, 2012



Source: Bureau of the Census, "Asian alone or in any combination by selected groups, 2012," available at http://factfinder2.census.gov/bkmk/table/1.0/en/ACS/12\_1YR/B02018 (last accessed March 2014).